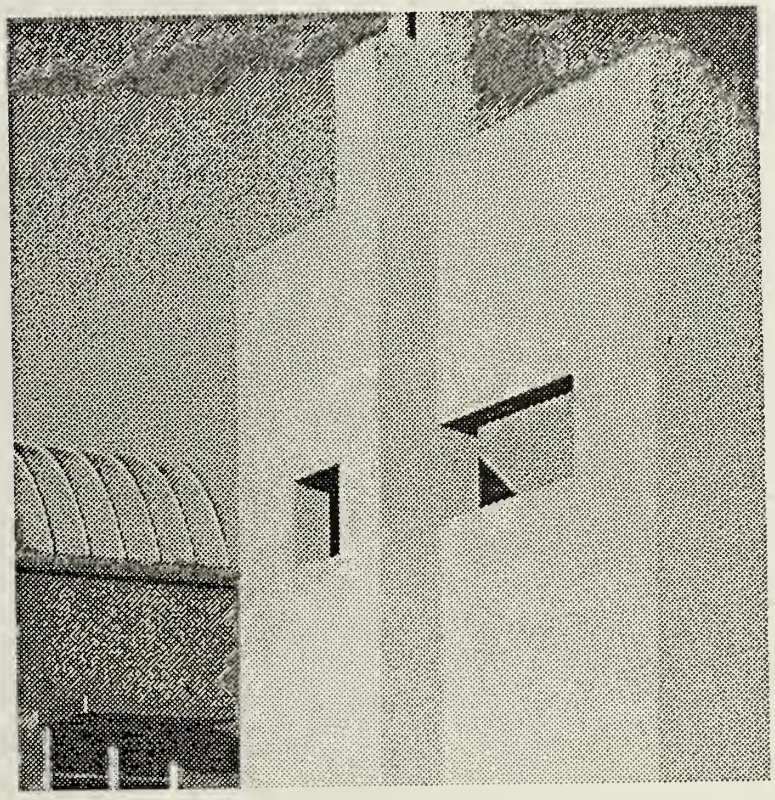
PRESIDENTIAL

Design Awards

1995



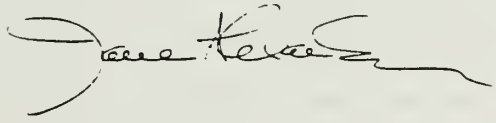
1995 FEDERAL DESIGN ACHIEVEMENT AWARDS

Design and government are natural allies. Both seek to serve the people in meeting their fullest potential and in helping the nation achieve its highest aspirations.

A restructured economy, rapidly advancing technology, and increasingly diverse social and cultural environments combine to make our world complex and difficult to understand. Good design can bring clarity and order to everyday life. It is a universal presence which impacts everyone.

As the federal government responds to changes in society, technology, culture, and the economy, design can be an integral part of the process. It can illuminate the reinvention of our government—helping it operate internally more smoothly and efficiently, and making it more understandable and user-friendly to its citizen customers.

Federal Design Achievement Awards illustrate some of the effective ways that the combination of art and science in design are serving both goverment and society. This year's projects demonstrate the strategic value of design in meeting environmental challenges, improving communities, educating and inspiring our citizens, solving human problems and advancing the cultural life of the nation. They are a tribute to the finest in our federal agencies and to designers whose vision, creativity and commitment are making government better able to fulfill its responsibilities to the people it serves. The National Endowment for the Arts is proud to honor these 77 projects and salute the federal agencies and designers who have improved the lives of so many Americans.



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ARCHITECTURE

The Architectural Advisory Board

Embassies are an opportunity to export the official presence and image of the United States in built form. Serving this purpose, the buildings should be models of architectural excellence that connote the optimism and values of our nation while expressing a sensitivity for the design traditions of the host country. To help meet these objectives, in 1954, the State Department's Office of Foreign Buildings Operations (FBO) created the Architectural Advisory Board (AAB). The board is made up of three internationally prominent American architecture practitioners and educators. Designers on the AAB have included Pietro Belluschi, Eero Saarinen, Charles Moore, Harry Weese and Thomas Beeby. Each member serves for a three-year term, and together their primary mission is to examine conceptual designs for new embassies and provide design guidance to FBO and its contracted architects.

As time has passed, this process has evolved in several ways. As a commission is initiated, the AAB participates in the selection of a design firm. On occasion, it offers counsel on general design guidelines and the appropriateness of design criteria. More routinely, it reviews specific building proposals, usually in two stages. A first, early meeting is devoted to the critique of two or three alternatives for a project. A second session allows the Board to focus on the development of a single approach working with the architects to point out esoteric embassy requirements, resolve conflicts among security, the complex demands of the program and architectural quality, and address the unforeseen challenges that inevitably arise as a design matures.

Numerous award-winning buildings and a body of work internationally acclaimed by architectural critics attest to the long-term success of the Architectural Advisory Board. It opens up a creative dialogue and establishes benchmarks of excellence that encourage designers to do their best.

Credits:

Department of State, Office of Foreign Buildings Operations

Barataria Environmental Education Center, Jean Lafitte National Historical Park and Preserve
New Orleans, LA

A prominent example of ecologically-conscious design, this building almost disappears into its setting. The Barataria Environmental Education Center is a facility located in a swamp-land woods at the end of a boardwalk where visitors can explore the natural and cultural diversity of the Mississippi River delta. Facilities are organized along a central spine and include a library, workshop/laboratory, amphitheater and an audio visual area, each gently tucked among the trees of an old pecan grove. Amplifying this closeness to nature, skylights and translucent roofing materials as well as walls treated as grids of windows or framed openings create spaces where inside and outside seem to merge. Many of the spaces are cooled with breezes and fans—another way visitors remain in touch with the environment.

Massing, siting and structure are sensitively developed. By breaking the Center into multiple volumes, it becomes a rather unassuming background element in the landscape. It is a collection of tranquil spaces, dappled with sun and shadow, that is so thoughtfully woven into the forest that no major trees had to be removed to accommodate the design. Structurally, in an approach typical of vernacular delta architecture, the entire project and adjoining pathways are lifted above the swamp on concrete columns to preserve existing drainage patterns, minimize damage to plants and animals, and elevate the floors above flood level during hurricanes.

As the years pass, life of all kinds will enrich the Center. Vines will climb the columns. Alligators will wander underneath the pavilions. Students, teachers and Park Service staff, along with others with an interest in the environment, will come to learn about and observe this special world.

Credits:

Department of the Interior, National Park Service, Denver Service Center and the Jean Lafitte National Historical Park and Preserve

Eskew Filson Architects

Daybreak Grove/Sunrise Place

Escondido, California

These two housing projects have a heartwarming sense of community, color and vitality. It is easy to imagine children running around the play areas and neighbors chatting on the patios. For these achievements alone, the projects merit attention. When a few additional facts—that these are homes for low- and very low-income families, and that the two- and three-bedroom multi-story units were built for about $50 per square foot—are added to the story, then Daybreak Grove and Sunrise Place stand out as extraordinary achievements. They illustrate the critical point that quality design is dependent on the wise use of resources rather than simply on the quantity of resources.

Each complex includes parking, and is close to schools, shopping and public transportation. Of equal importance to the single-parent families that make up the bulk of the residents, both groups of townhouses (thirteen in Daybreak Grove and eight in Sunrise Place) are clustered around nicely scaled common spaces that recall Spanish plazas and the bungalow courtyards of earlier California developments. These spaces are the heart of community interaction. Kitchens and outdoor terraces look on to these open areas. At Daybreak Grove, play equipment is installed here. And in both communities, the far side of the court is the location of the laundromat, cleverly reinterpreted on the exterior as a stepped "theater."

On the interior, in spite of compact plans, the townhomes boast double-height and loft spaces. Some have extra rooms for use by guests or as an office. Windows not only let in generous amounts of light but open to permit cross ventilation and breezes. These homes are not lavish, but they are humane and welcoming environments that nurture feelings of hope, pride and independence.

Credits:

Department of Housing and Urban Development, Pacific/Hawaii Field Office

North County Housing Foundation

Davids Killory

Focus: HOPE Center for Advanced Technologies

Detroit, Michigan

The vision of Focus: HOPE Center for Advanced Technologies (CAT) was to take an abandoned fragment of an industrial city and transform it into a symbol of progress and a gateway into a better life. The CAT has turned a lifeless 50-year-old Ford engine plant in a section of Detroit where the unemployment and labor dropout rate averages 45 percent into a state-of-the-art computer-integrated manufacturing and learning center. Only modest changes have been made to the outside of the building, but the interior incorporates the latest manufacturing technology suited for low-volume, high-skill production. The factory floor is organized into six Neighborhoods composed of high-tech manufacturing cells producing one or more products. People and materials move through the Neighborhoods on "streets" while utilities are delivered via sub-floor "alleys." The visual focus of each Neighborhood is a Power Tower with services and mechanical equipment on the ground and third floors and a training/conference room in between.

The three-story office block in front of the manufacturing floor has been remodeled to include an electronic library, a learning center and meeting rooms, a cafeteria and a visitors platform projecting into the factory. A new central stair with a large window connects the second and third floors and symbolically opens the factory—with its new jobs and careers—to the people living in the surrounding area. More pragmatically, the plant has been thoroughly insulated and employs a cogeneration strategy to significantly reduce energy consumption. Hands-free amenities such as sliding doors, ambient lighting and drinking fountains help deliver the message that this facility looks to the future.

In an era when industry is moving to the suburbs, exacerbating urban sprawl and dispersing jobs, this project demonstrates the viability of rehabilitating older inner-city factories and communities. Focus: HOPE Center for Advanced Technologies maintains its exterior as a reminder of the factory that discarded the neighborhood, while inside, the dramatic design matches the vitality of the program and confirms the potential of its workers to contribute to this country's industrial rebirth. It embodiess two essential elements of any living community—continuity and change. In the final analysis, the CAT is a facility that makes a profound statement about human empowerment.

Credits:

Department of Commerce, Economic Development Administration, Chicago Regional Office

Focus: HOPE

Smith Hinchman & Grylls Associates, Inc.

Independence Square

Washington, DC

Occupying a narrow site about 150 feet wide, Independence Square is actually two nine-story offices that extend for 1100 feet along the elevated Southwest Expressway. The smaller building is a headquarters for the Office of the Comptroller of the Currency; the larger is headquarters for the National Aeronautics and Space Administration (NASA). On the southern, highway elevation, the facades are modulated as a sequence of simply detailed, large masses. On the northern side, the fenestration is a rich blend of multiple volumes, projecting bays, entry canopies, and an arcade that creates an urban, pedestrian-sensitive streetscape without being extravagant or jumpy. A similar palette of materials, textures and rhythms relate the two structures visually, but in addition to differences in size, there are unique formal elements and variations in detail—for instance, the west end of NASA's building features a curved wall—that give each agency a subtle but distinct architectural identity and presence in the dense federal landscape of downtown Washington, DC.

Independence Square also is remarkable for its thoughtfully scaled interior and rooftop spaces. Lobbies combine stone, wood and metal details, as well as art and special lighting effects, in ways that are simultaneously impressive and inviting. And echoing the construction of the arcade, a metal trellis on the roof enlivens a landscaped terrace with dramatic views of the Capitol and other landmarks.

Finally, this ensemble is both practical and functional. Built by a private developer and leased to the GSA, construction costs were in the low to moderate range. This, however, did not lead to compromises in quality. Not only are the buildings aesthetically compelling, but they are energy efficient, fully ADA compliant, and flexible enough to accommodate future changes in technology and layout.

Credits:

General Services Administration, National Capital Region

National Aeronautics and Space Administration

Boston Properties, Inc.

Kohn Pedersen Fox Associates, PC

Lowell Performance Pavilion
Lowell, Massachusetts

This project is an wonderful example of civic architecture. With its modest scale and chaste detailing, the Lowell Performance Pavilion makes the point that, from a community perspective, good building does not have to be grand or flamboyant to be successful. A significant element in the fabric of an historic industrial town, the pavilion serves several purposes. Running 140 feet along a canal, the open air structure defines a critical edge for two urban spaces, the canal walk on one side and Boarding House Park on the other. As a stop on the trolley line, it becomes a ceremonial portal. It is also a connector, a pleasant pedestrian link between two major park buildings, Booth Mills and the restored Boarding House. Finally, it is a landmark, the preferred venue for celebrations and cultural events.

Functionally, the pavilion supports many activities, encouraging the kind of vigorous public life that is essential in a democratic society. Facilitating performances, the trellis incorporates the structure and power supply for theater lighting, sound equipment and scenery, and the park can be used for informal seating. As vines grow up the columns and around the arches, the building is a relaxing and sheltered resting place for weary tourists. And with temporary kiosks and booths, it is transformed into a festival marketplace.

The way details are handled is the third strength of this design. The choice of steel as a material is a welcome counterpoint to the long brick facades of old industrial buildings, adding a sense of excitement and vitality. The pavilion offers an effective hierarchy of major and minor spaces. And while the framing and arched motifs recall eras past, these elements are in no way sentimental and ultimately convey their contemporary roots.

Credits:

Department of the Interior, National Park Service

The Lowell Historic Preservation Commission

Brown & Rowe, Inc.

William Rawn Associates, Architects

LUCERNE GARDENS
Boston, Massachusetts

In spite of the need, truly creative solutions to the low-income housing problem are hard to come by. That is what makes Lucerne Gardens so special. In an area of Boston that appears abandoned and dangerous, this undertaking is a symbol of hope. And design is an important dimension of this message. To reinvigorate a sense of community and maintain the scale of the neighborhood, Lucerne Garden's 45 two- and three-bedroom units are distributed among 18 residential buildings that, along with a separate community center, fill city blocks and reclaim the street as a place for people. The gabled roofs, clapboard siding, dormer windows, and porches are typical details of the area. The carriage-house profile of the community center is an inviting environment for pot luck suppers, block parties and local celebrations such as student appreciation night. Other project amenities include a tot park, professional landscaping and interior finishes such as dishwashers and tiled bathrooms. Overall, Lucerne Gardens conveys a sense of quality and solidity.

This effort was realized through a partnership among private and public lenders. To contain costs, units were standardized and grouped together with minimum circulation in three- and four-story buildings. In addition, significant parts of the framing were prefabricated. All structures are energy efficient and were built over an 11 month period. In the arena of program and design, Lucerne Gardens was the outcome of numerous neighborhood meetings and citizen input. And to help assure that the development meets its social objectives, there is a resident services coordinator guiding families to take advantage of all possible assistance, and a program that will eventually encourage long-term cooperative ownership. Clearly, America needs to design and invest in more of this kind of low-income housing.

Credits:

Department of Housing and Urban Development, New England Area

City of Boston, Public Facilities Department

Master Facilities Program for the National Museum of the American Indian

Washington, DC

Although seldom acknowledged, design excellence is generally supported by thoughtful and imaginative planning. The Master Facilities Program for the National Museum of the American Indian is important as an outstanding example of this earliest and least understood stage of the design process. The document is notable for its comprehensive analysis. It reviews the proposed sites—new exhibition facilities to be built on the Mall in Washington, DC, and storage and support space on the Smithsonian campus in Suitland, Maryland. The program comments on the breadth and quality of the collections, explains how materials might be used and displayed, and proposes a detailed set of design guidelines.

All this was achieved as a collaborative effort with expert contributions from many areas. Undoubtedly, the most valuable input came from Native American representatives who conveyed key facts about the meaning, rituals and traditions surrounding objects in the Smithsonian's possession. This, in turn, led to modifications in the program. In particular, in the Mall facility, emphasis is placed on developing exhibits and demonstration spaces that show relationships among materials and cultures, rather than the compartmentalization of information. At Suitland, the building is redefined as an interactive center that goes beyond the housing and care of collections to incorporate research and activities related to the preservation of Native American culture. And finally, a "museum without walls"—based on telecommunications technology—is added to the proposal as a way to link Native Americans throughout the hemisphere to the Smithsonian facilities and events.

Without this thorough investigation, critical needs of the National Museum of the American Indian would probably have gone undiscovered and opportunities for innovation would have been lost. Especially in design areas not commonly explored, this kind of creative analysis and planning is absolutely essential.

Credits:

Smithsonion Insitution, Office of Design ond Construction

Venturi, Scott Brown ond Associotes, Inc.

Oakland Federal Building

Oakland, CA

As a single, potentially overwhelming project, it takes talent and finesse to add over 97,000 square meters (about 1,000,000 square feet) of office space to a city center in a manner that truly enhances the urban environment. Here, a complex program that includes a courthouse and offices for 26 different federal agencies is divided into an ensemble of structures and open spaces that make major contributions to the revitalization of downtown Oakland. The twin, 18-story towers add a pleasing and distinctive profile to the skyline. An inviting landscaped plaza, dramatic, glass-enclosed entrance rotunda with vistas to the adjacent Preservation Park, and artwork integrated throughout the design provide amenities enjoyed by citizens, employees, passersby and numerous visiting school groups.

The scale of the Federal Building is appropriately monumental—a symbol of strength and dignity—incorporating elegant stone and metal details as well as fountains, frescoes and sculptures that continue a tradition of crafted construction common to government buildings from eras past. Interestingly, these same features, in combination with the massing of the center that descends from the pair of symmetrical high-rise blocks to three more relaxed four- and two-story pavilions, help make this Oakland landmark a better neighbor to the nearby Victorian residential area. This relationship also mirrors the public/private cooperation and respect that brought together the federal government, the city's redevelopment agency and a private developer as partners in a lease/purchase agreement that yielded superior quality and flexibility at a price competitive with the existing market for office space.

Credits:

General Services Administration, Pacific Rim Region

City of Oakland

Kaplan McLaughlin Diaz

THURGOOD MARSHALL FEDERAL JUDICIARY BUILDING
Washington, DC

This is a major federal building that was completed four months ahead of schedule and ten percent under budget. Moreover, it was built by a private developer/architect team without capital funds from the government and will revert to federal ownership at the end of a 30-year lease. Certainly these facts merit recognition. But over the long-term, the Thurgood Marshall Federal Judiciary Building in Washington, DC, will be remembered and honored because of its extraordinary planning and design.

Located on Columbus Circle, a prominent public space hallmarked by grand fountain and a vista down Delaware Avenue to the Capitol, the Marshall Building, along with the City Post Office, frames Union Station, the Beaux Arts gateway to the nation's capital. The structure follows the street line, creating a critical architectural edge that defines and contains the east side of the circle. The building exploits a contemporary vocabulary of volumes and openings that respectfully recalls the cadence, basic rhythms and structure of the station without becoming a pastiche of historic elements.

Equally important is the way the building responds to the scale of its surroundings. Upper floors are terraced back behind a strong cornice so the building does not appear too massive or tall. Adjacent to the station, facades are relatively solid and highlighted with arches. Yet without compromising unity, near the townhouses, elevations have more glazing and are articulated with layers of well-proportioned rectangular openings.

The public entrance to the Marshall Building is a landscaped atrium that provides an attractive view for interior offices. With other employee-friendly amenities such as a daycare facility and a fitness center, this edifice can be cited as a model work environment.

Credits:

Architect of the Capitol

Boston Properties, Inc.

Edward Larrabee Barnes/John M. Y. Lee & Partners

U.S. Border Station

International Falls, MN

Crossing a border can be an uncomfortable, even tense and unpleasant experience, complemented with an architecture that often reflects these grim emotions. The U.S. Border Station in International Falls, Minnesota, responds to this stereotype with a playful approach to federal architecture. Located in an industrial zone, the site features railroad tracks, elevated pipe lines and warehouses. And the General Services Administration mandate for the facility required a building "as functional as possible" constructed with materials "selected for their ability to withstand the elements." Fortunately, the designers responded to these challenges with a blend of pragmatism, joy and finesse.

To avoid interfering with 11 utility easements on the property, the station is conceived of as a bridge to minimize the ground level footprint. Next, to infuse the project with color and vitality, the architects exploit references to the American flag as a theme for building details. Tower elements are a deep blue accented with a regular pattern of white squares. The exterior of the bridge space is red with white stripes. Interiors are developed with a similarly bold vocabulary. And in the most literal allusion to the flag, the red and white stripes of the main inspection canopy wave over and symbolically shelter all who enter the United States as they drive through the inspection lanes.

It is important to understand that this optimistic expression of the American experience was achieved within the originally strict parameters of the commission. The total cost of the project was slightly below budget; brightly colored surfaces are coated with durable resins and polymers; the entire structure is well insulated; and windows are designed to maximize view while keeping any heat loss to a minimum.

Credits:

General Services Administration, Great Lakes Region

Architectural Resources, Inc.

United States Embassy Chancery

Muscat, Oman

Security measures for U.S. embassies read like the program for a fortress: perimeter walls surrounding a complex must resist breach by vehicles, climbing, prying, hammering and sawing; access must be channeled through a minimum number of controlled entrances; only 15 percent of each exterior structural bay can be glazed; building service systems must be designed in parallel networks, with utilities that serve secure areas made accessible only to U.S. personnel with security clearances; and the list goes on. In this context, the Chancery in Muscat, Oman demonstrates that it is possible to meet these stringent requirements and still create a facility that is both sensitive to its cultural setting and establishes a positive image for the United States.

Responding to guidelines intended to ensure the Islamic character of public architecture in Oman, the Chancery is enriched with arched openings and colorful tile and marble details that give the structure an appropriate monumental profile while providing a play of human-scaled geometric patterns throughout the complex. Like other buildings in the hot climate, facades are layered so windows are shaded by loggias and have their vistas framed by piers and arches. The plan, with its series of courtyards and gardens, also reflects the regional style, creating many pleasant, even intimate, enclosed or interior spaces graced with plants and pools of water. In the final analysis, the Chancery respects the local traditions of the workers and visitors who will use the facility, without compromising the forward looking character of its mission and the innumerable security measures essential in the contemporary political climate. It complements the culture of Oman but is also an architectural statement that expresses ideals and values beyond that context.

Credits:

Department of State, Office of Foreign Buildings Operations

Polshek and Partners Architects

UNITED STATES HOLOCAUST MEMORIAL MUSEUM
Washington, DC

The United States Holocaust Memorial Museum represents one of those rare moments in architecture where the stone, steel, glass and other materials involved in the fabrication of a building are transformed into an experience that must be described as "transcendent." Here design becomes a bridge linking past history with present realities, linking cold and horrifying facts with overwhelming emotions and presenting a challenge to respect and treasure the diversity of humankind.

Located on a midblock site just south of the Mall in Washington, DC, the museum's massing, limestone and brick facades, and references to neoclassicism are appropriate to its prominent location and the scale of federal buildings that surround it. On the other hand, while the building acknowledges its context, it also disengages itself from the institutional urban fabric. The east facade is hallmarked with a dramatic stone screen that moves in a great arc onto the sidewalk. The west facade has a plaza to welcome visitors, contrasting a grand hexagonal pavilion off to the side with a glimpse of the brick towers and glass-enclosed catwalks that lie within.

This quality is amplified on the interior. The entry point is the three-story Hall of Witness where a stair cuts into the space on a diagonal, a trussed skylight warps overhead, and industrial metal braces and vents disconcert without literally recreating a particular Holocaust site. The overall intent is clear, but those that enter are prompted to interpret this hall and the exhibits that unfold in the sequence of bright and dark, tall and low chambers, catwalks and towers that follow as personal experiences rather than a proscribed recounting of history. In this structure, architecture, materials and light are integral dimensions of the displays, key elements in the museum's poignant message. The culmination of the visitor's passage is the Hall of Remembrance, a broad skylit hexagonal room designed for prayer and contemplation.

Programmatically, this Holocaust memorial is much more than a museum. Approximately 25 percent of its space is dedicated to permanent exhibits with another five percent allotted to temporary installations. In addition, the building houses a major research library and archives for scholars, a cinema and a theater, a 10,000 square foot conference center, an interactive computer learning center, classrooms and areas for impromptu discussion. In many ways it is truly a place for learning—touching the minds, the hearts, the spirits and the souls of all those that pass through this very special architectural experience.

Credits:

United States Holocaust Memorial Museum

Pei Cobb Freed & Partners

Women's Rights National Historical Park Wesleyan Chapel Block

Seneca Falls, New York

This is a memorial that succeeds due to its restraint- rather than for high-profile design qualities. The Women's Rights National Historical Park, built around the ruins of Wesleyan Chapel (home of the first women's rights convention in the United States held during July 1848), is quietly part of the Seneca Falls townscape, much as the chapel was when it was originally constructed in 1843. The concept is to preserve the current fragmentary nature of the historic building as a symbol of the intermittent attention historically devoted to the struggle for the rights of women. A roof shelters the ruins and stone walls, marks the street edge and creates a gateway to the park. Off to the side, terraced seating and a sloped lawn articulate a resting place where individuals might take a moment for quiet meditation or groups might gather to celebrate and continue the tradition of public dialogue that has hallmarked the history of this site. An additional exterior feature is a bluestone wall along the edge of the lawn where, as a focus for contemplation, water flows over an inscription of the Declaration of Sentiments—the centerpiece manifesto of the 1848 convention. To complete the experience, the Village Hall that adjoins the open space is now used as a visitors and administrative center.

Everything about the project is quite modest. Even its final cost was ten percent below budget. But great skill has been used to bring together elements of urban planning, architecture, preservation, art, landscape and interpretive design to create a powerful landmark that captures the history of this place without sentimentally reconstructing it. In the end, those that pass through this park leave understanding that the struggle for women's rights is an integral and on-going facet of the struggle for all American rights.

Credits:

Department of the Interior, National Park Service, Denver Service Center

Ann Wills Marshall

Ray Kinoshita

Robert Silman Associates

A. E. Bye Associates, Landscape Architects

The Stein Partnership, Architects

ENGINEERING AND ENERGY CONSERVATION

THE DOUBLE ARCH BRIDGE OF THE NATCHEZ TRACE PARKWAY
Franklin, TN

Since the late 1930s the National Park Service has been constructing the Natchez Trace Parkway, a two lane roadway that runs from Nashville, Tennessee to Natchez, Mississippi. This roadway closely aligns with the historic Natchez Trace, the most highly traveled wilderness trail of the old Southwest. The Parkway is an unhurried connection between Natchez and Nashville that offers a sense of the historical significance of the Trace, while preserving the character and natural beauty of the surrounding landscape. The design and construction of the Double Arch Bridge, spanning a large valley across Tennessee Route 96 near Franklin, Tennessee, represents one of the final links of the 50-year parkway project.

The major challenge of the project was to preserve and enhance the area's natural beauty while maintaining a high standard of economic and environmental responsibility. The project required an environmental sensitivity that precluded those permanent scars in the landscape that typically accompany construction. The north face of the valley was deemed particularly sensitive. Equipment could not be placed on the steep slope on this side of the valley. As it crosses the valley, the bridge would span over 1600 feet and rise up to 155 feet above the valley floor. During construction, little or no interruption of the traffic on Tennessee Route 96 below was allowable. Overall costs, of course, had to be kept to a minimum.

Construction on the bridge was completed on time and without claims, cost increases, or accidents. No permanent damage to the environment was incurred during construction. Traffic on Route 96 was not interrupted. The result of the project is a structure that meets all of the National Park Service's requirements for functionality and aesthetic appeal. The project proves that federal design initiatives can be creative, while emphasizing the use of current design and construction technology.

Credits:

Department of Transportation, Federal Highway Administration, Eastern Federal Lands Highway Division

Department of the Interior, National Park Service, Denver Service Center, the Southeast Region and the Natchez Trace Parkway Visitor Center

Figg Engineering Group

Environmental River Engineering on the Mississippi

The Environmental River Engineering project was implemented in 1970 by the St. Louis District of the U.S. Army Corps of Engineers to correct the lack of biodiversity in the Middle Mississippi River area. In the early nineteenth century, the river was narrow and deep, contained by stable banks lined with vast forests. As these forests were cleared over the course of the century, the banks deteriorated, the river widened and grew shallower, navigation became dangerous. Near the turn of the century, the Army Corps of Engineers began a bank stabilization program to ensure safe river traffic. The navigational structures imposed upon the river ensured a clear channel for shipping but severely damaged the river's ecology.

It was the object of the Environmental River Engineering project to reverse man's destruction by stabilizing the river banks with navigational structures that work in harmony with the natural laws of the river. The river presents a dynamic and fast-changing set of conditions calling for a great number of specific solutions. Each navigational structure was designed individually, to fit specific locations along the river. Many newly designed structures were model tested before being installed in the river, avoiding the cost risks associated with field testing.

Tests conducted by the Illinois and Missouri State Departments of Conservation show that the variety of dikes, revetments, and side channel improvements implemented over the past 20 years of the program's history have radically improved the biological conditions along the Middle Mississippi. This environmental goal is being accomplished without impeding traffic through the main navigation channel. The project's success has led to its being adopted along other major river systems.

Credits:

Department of Defense, U.S. Army, Department of the Army, Corps of Engineers, St. Louis District

Marathon Battery Superfund Site Design

Cold Spring, NY

At the Marathon Battery plant in Cold Springs, NY, one of the Northeast's worst hazardous waste sites, contamination from toxic heavy metal waste discharges threatened local residents and a pristine Audubon wildlife sanctuary. Through the Comprehensive Environmental Response, Compensation, Liability Act (Superfund) the Environmental Protection Agency and U.S. Army Corps of Engineers jointly administered and managed an effort to develop a cost-effective design to remediate areas contaminated by heavy metals and then to successfully execute the cleanup operation.

The project incorporated sampling; geostatistical analysis; remedial design; development of plans and specifications and subsequent execution of the project including dredging, dewatering, sedimentation, chemical fixation and transportation of the treated material; marsh restoration; and development of a long-term monitoring program to track project success.

The Marathon Battery project took advantage of several innovative, cost-saving features. A sophisticated soil, water, sediment and vegetative plan, coupled with geostatistical modeling, sharply reduced project scope and cost. Value engineering, a formal evaluation process developed for large-scale wastewater treatment projects, identified $8 million of savings. A generic fixation technology was developed that eliminated the need for expensive proprietary formulas, thereby expanding competition among construction contractors and reducing costs.

The Marathon Battery Superfund Site epitomizes the success of both federal and private sector partnerships, and interagency partnerships. This project moved forward on budget and schedule, achieving technical goals and objectives. The remedial design successfully applied innovative management, engineering and technological advances to clean up a hazardous waste site that threatened nearby residents and ecosystems.

Credits:

Department of Defense, U.S. Army, Corps of Engineers, Kansas City District and the New York District

Environmental Protection Agency

Malcolm Pirnie, Inc.

Point Marion Lock Cofferdam

Point Marion, PA

The construction of an entirely new lock to replace the existing 70-year-old Point Marion lock and dam facility along the Monongahela River in Dunkard Township, Pennsylvania, would have entailed serious interruption of commercial river traffic over a three-year construction period. Additionally, the construction of an entirely new lock would have involved the excavation of over a mile of river bank and required the relocation of portions of both a State highway and railroad tracks.

The U.S. Army Corps of Engineers, therefore, decided to integrate the new lock into the existing lock and dam system. The new dock is located 10 feet landward, and 13 feet below the existing lock's wall and foundations. In order to prevent collapse of the old wall (and ensuring its continued use during construction of the new system) project engineers employed more than 500 large capacity 250-ton rock anchors to prevent the wall from sliding or overturning onto the excavation for the new lock. An extensive computer instrumentation system was implemented to continuously monitor the cofferdam for structural integrity.

The use of the anchor and monitoring systems advanced the confidence and ability of Corps engineers and ensured significant cost savings. The innovative approach to design combined with site measurement of performance proves an excellent model for future projects.

Credits:

Department of Defense, U.S. Army, Corps of Engineers, Pittsburgh District

Solar Energy Research Facility

Golden, CO

The Solar Energy Research Facility (SERF) was designed and built to help accomplish the National Renewable Energy Laboratory's (NREL) mission of developing renewable energy technologies, improving energy efficiency, advancing related science and engineering, and facilitating commercialization. To support NREL's mission, it was imperative to construct a facility that would be both an effective solar energy research laboratory and serve as a model of NREL ideas.

Twelve energy saving technologies are used in the facility, resulting in significant operating cost savings. These technologies include daylighting, energy-efficient fluorescent lighting, evaporative cooling, a trombe wall, and an exhaust heat recovery system. Some of these technologies will pay for themselves in three years or less and represent a thirty percent reduction in operating costs when compared to a similar, conventionally equipped facility.

SERF's design also emphasizes functionality and flexibility. It incorporates three contiguous modules built along the natural contours of the land, each module containing an office pod and a laboratory pod. The laboratories are uniform and could, within a given group, be easily used for other purposes. Offices and laboratories are clustered for maximum synergy and efficiency.

SERF uses state-of-the-art safety features in building air management and utility efficiency. Laboratories handling hazardous materials are grouped together and served by their own freight elevator and service corridor. Laboratories also have standard safety equipment such as eye-wash stations, showers, and chemical fume hoods.

The philosophy behind SERF's distinctive design and energy-conserving features is one of devising and deploying technologies in harmony with the natural balance of ecosystems. But SERF represents even more—a building that delivers low life-cycle costing without expensive up-front expenditures. It is more than a cost-effective building with an innovative modular design; it is truly a laboratory of the future–one that successfully achieves our nation's goals for a clean environment and energy efficiency.

Credits:

Department of Energy, Golden Field Office, National Renewable Energy Laboratory

Anderson DeBartolo Pan

Talmadge Memorial Bridge Replacement

Savannah, GA

The Federal Highway Administration, the Georgia Department of Transportation, and a group of private design consultants engaged in a partnership to replace the old Talmadge Memorial Bridge. A new bridge spanning the Savannah River was necessary to provide increased access to the Port of Savannah by ship without limiting access to the city of Savannah by automobile. Horizontal and vertical clearances were established that would span local roads, railroad lines, Georgia Port Authority's warehouse and dock facility, the Savannah River and portions of the Savannah-Ogeechee canal.

It was determined that a cable-stayed structure was the most economical solution to meet functional requirements and site restrictions. This state-of-the-art structural system has rarely been employed in the U.S.. Formal design guidelines had not been established for such systems. The unique structural system employed precast, prestressed concrete members erected in segments, then post tensioned together. The completed bridge spans 7,500 feet with a main navigational passage 1,100 feet wide and 185 feet high. The new structure removes all piers from the river channel and provides a modern four lane highway into the City of Savannah.

The bridge meets stringent functional requirements through an inspiring level of mastery in a technology that is relatively new to the U.S. The bridge also acts as a powerful new gateway to the city of Savannah, synthesizing the best in new construction technologies into a visually integrated form. The project demonstrates that a bridge of a beauty equal to the best in the world can be made from the most pragmatic and economical elements and methods.

Credits:

Department of Tranportation, Federal Highway Administration, Georgia Division

Georgia Department of Transportation, Office of Bridge Design

DRC Consultants, Inc.

Parsons Brinckerhoff Quade & Douglas

United States Naval Academy Bridge

Annapolis, MD

The Maryland State Highway Administration and the Governor's Office of Art and Culture co-sponsored an international design competition to replace a low-level, structurally deficient draw-bridge with a new, high-level fixed bridge over the Severn River in Annapolis, Maryland. The jury included four bridge engineers, an architect, a landscape architect, a sculptor, and representatives of environmental groups, historic groups, and the local community.

The planned bridge was required to carry Maryland Route 450 through the Naval Academy grounds and over the Severn River, serving as the eastern gateway to Maryland's historic capital, Annapolis. The site required a structure that would suitably respect and enhance the historic and scenic nature of the site, while maintaining a 75-foot minimum clearance, and enriching the area environmentally.

The Federal Highway Administration typically requires the preparation of at least two independent designs and construction bids for a bridge project of this magnitude. In view of the State's desire to implement the competition process, the Federal Highway Administration agreed to accept the winning concept from the competition and to forgo the requirement for alternative proposals.

The U.S. Naval Academy Bridge is the first successful major bridge design competition project to reach completion in the past 100 years. It is the culmination of the extraordinary collaborative efforts of federal and state agencies to involve leaders in the bridge engineering field and to challenge them to think in technical, economic, and aesthetic terms.

Credits:

Department of Transportation, Federal Highway Administration, Maryland Division

Maryland State Highway Administration

Greiner, Inc.

GRAPHIC DESIGN

COOPER-HEWITT: A DESIGN RESOURCE
New York, NY

Founded in 1897, the Cooper-Hewitt Museum, now the National Design Museum of the Smithsonian Institution, was created by the Hewitt sisters to be a visual library for students and workers in the decorative arts. Since that time the museum has become an important resource for designers and scholars throughout the world with nearly a quarter of a million objects in its collections.

From March 1991 to August 1992, the Cooper-Hewitt held a marathon exhibition, Cooper-Hewitt: A Design Resource, which displayed close to a thousand objects. The exhibition represented four curatorial departments—Decorative Arts, Drawings and Prints, Textiles, and Wallcoverings as well as the museum's library and archives. By displaying a wealth of objects over an extended period of time, the exhibition narrated the history of the museum and demonstrated the significance of its collections.

Using text panels at the entrance to each gallery, the curators were able to present the development of the philosophy behind the museum's collection. After concentrating on European ornamentation and decoration, the museum's focus shifted to modernism, then to universal design and finally to the design process. The combination of objects and text in Cooper-Hewitt: A Design Resource revealed the changes in the way the museum chose objects over the course of nearly one hundred years and emphasized its role as a national design resource.

Credits:

Smithsonian Institution, Cooper-Hewitt, National Design Museum

Drenttel Doyle Partners

Kiss + Zwigard

THE EDGE OF THE MILLENNIUM: AN INTERNATIONAL CRITIQUE OF ARCHITECTURE, URBAN PLANNING, PRODUCT AND COMMUNICATION DESIGN

New York, NY

A compilation of 298 essays by architects, designers, critics, philosophers, historians, and design consultants from around the world, The Edge of the Millennium is a book based on the conviction that designers are accountable for the effects, messages, products and cities they design. The breath of experience among the contributors provides a multidisciplinary cross-section of reflections on contemporary life.

Developed out of a January 1992 conference, the book asks what value the design professions will have in the next millennium. In the spirit of the National Endowment for the Arts Federal Design Improvement Program, the four day, intensively speculative, conference included a wide range observations. A close working relationship between the book's editor at the Cooper-Hewitt, National Design Museum and the designer resulted in a lively and engaging text that is visually stimulating and coherently structured. Each section begins with an analytical overview, and carefully chosen images complement the text throughout the book.

Enhancing the international influence of the Cooper-Hewitt, and anticipating many of the issues which will confront us at the turn of the century, The Edge of the Millennium stresses the importance of design in shaping the civic realm, and has proven to be popular among students, design professionals, cultural historians and all those interested in design.

Credits:

Smithsonian Institution, Cooper-Hewitt, National Design Museum

ReVerb

Exhibition Catalogue for Carlos Collazo 1956-1990 Exposicion Homenaje
San Juan, PR

Carlos Collazo was a Puerto Rican painter, ceramist, and graphic designer who died of AIDS at the age of 34. Designed for people without access to the artist's work, or his contribution to our society, Exhibition Catalogue for Carlos Collazo 1956-1990 Exposicion Homenaje is a unique contribution to the history of art in Puerto Rico.

Reflecting the social and artistic context of the artist, the catalogue incorporates traditional oral history with theoretical background. The initial investigation and documentation of the artist's work, as well as biographic material had to be assembled by the designer. By making the investigation of the artist as through as possible, the catalogue can be used as a reference for further studies.

Limited to an edition of 1,000 copies, the catalogue utilizes a riveted binding to withstand intensive library use. By establishing different levels of discussion within the format, the text mirrors the artists' ability to work in different disciplines. To navigate the material, the designers have created a unique system of iconography and because the artist's work is displayed chronologically, the reader can see how it changed after he was diagnosed as HIV positive.

With a scarcity of books on Puertorrician art, Exhibition Catalogue for Carlos Collazo 1956-1990 Exposicion Homenaje is an opportunity for the public to better understand the artist's work and his relationship to our society.

Credits:

National Endowment for the Arts, Museum Program

Instituto de Cultura Puertorriquena

Exploring Maps Teaching Packet

Based on the history of cartography, the Exploring Maps Teaching Packet was designed to accompany the USGS traveling exhibit Visual Geography. The poster and teaching modules are interdisciplinary and can be used for high school classes in geography, English, science, math history and world studies classes.

The two posters form a ten-foot timeline of maps from prehistoric times to the space age. The back of the posters includes two timelines, one with literary excerpts on mapping, exploration, and geography. The other is a blank timelinethat students can use to complete their own topics. Each panel on the back of the poster is in 8 1/2 x 11 format for easy reproduction.

One of the missions of the USGS National Mapping Division is to provide educational outreach that relates to earth science and mapping information. Staff from the National Mapping Division consulted on content and organized the permissions necessary for image reproduction. The maps were developed in consultation with geography teachers and the National Council for Geographic Education.

The federal government is one of the largest producers of maps in the world, and the art and science of cartography—a unique expression of culture—are being recognized in exhibitions at museums like the Smithsonian Institution and the Museum of Modern Art.

Credits:

Department of the Interior, U.S. Geological Survey, National Mapping Division

DouglasIGallagher

FDA Food Label Design

One of the central problems of graphic design is how to create a design which expedites the understanding of information. Rarely has there been a more formidable federal design challenge than the redesigning of the nutrition labeling for package foods mandated by the Nutrition and Labeling Act of 1990. The responsibility for the new labeling system fell to the Food and Drug Administration, the branch of the Department of Health and Human Services which regulates this kind of nutritional information.

The design had to attract the attention of an enormously diverse target audience, as it competed with the dramatic design of the product's package, in a severely restricted amount of space. After a three-year design process including the study of designs from other countries, numerous public hearings, over 1,200 consumer interviews, and the analysis of more than 40,000 comments, the FDA created a new standard for package food design including the new Nutrition Facts label.

By introducing a new nutrition tool called "daily value" in conjunction with a carefully chosen set of rules and typefaces, the new labels let consumers quickly and easily assess the amount of a particular ingredient as it relates to their overall daily diet. The FDA estimates that as much as $27 billion will be saved over the next 20 years as the result of Americans making better choices about their diets.

Credits:

Department of Health and Human Services, Food and Drug Administration

Greenfield/Belser Ltd.

FDIC Employee Handbook

Created in 1933, the Federal Deposit Insurance Corporation determines the safety and soundness of banks while solving the problems created when these institutions become insolvent. To meet the demands of their work, FDIC employees must be familiar with how the corporation is organized, and how it preforms its various functions. The redesigned FDIC Employee Handbook focuses on these employee needs.

The new handbook provides information about administrative and employment issues for both new and current employees, helping them integrate into the FDIC work environment. Because FDIC employees are given a number of publications during any given year, it was essential to design a document that would be well organized and easy to use. Breaking the topics into individual section areas met this demand and improved the manual's role as a valuable reference guide.

The poor reception of the previous version of the Handbook led to a rethinking of the entire document. Using an album format and a distinct pallet of cool tints, the designer has created an engaging and inviting publication. By carefully editing the content of the manual, the FDIC staff has eliminated language that would date the material, making the handbook a guide which will be useful for several years. The design also facilitates any updates required by subsequent editions.

Credits:

Federal Deposit Insurance Corporation, Office of Corporate Services, Design Unit

History of American Agriculture Poster

By detailing significant events in the development of American agriculture according to subject, A History of American Agriculture, 1776-1990, illustrates the evolution of U.S. agriculture in one accurate, attractive sweep. The poster, designed for both students and the general public, uses a timeline structure to present a decade by decade account of developments in areas such as economic cycles, farm machinery and technology and agricultural trade.

Based on a popular timeline poster published in 1976, the research was assembled, edited and prepared by the Department of Agriculture's Economic Research Service. The poster includes analysis of agriculture, economic and social science information, revealing the intricate developments of American agricultural history.

Given the problem of attracting the audience's attention while describing a number of subjects simultaneously, A History of American Agriculture, 1776-1990 displays a vast amount of information logically and aesthetically. The designers, taking advantage of electronic design capabilities, expedited the project by using a working poster at 50 percent of the final size.

Public response to the poster has been overwhelming, with sales surpassing those of all other Economic Research Service publications and the department's Agriculture in the Classroom program is adopting the poster for distribution.

Credits:

Department of Agriculture, Economic Research Service

Chaparos Productions Ltd.

IRS Customer Service Guide

The IRS Customer Service Guide is the culmination of extensive efforts by the IRS to develop an easy to use job aid for taxpayer assistors who answer millions of taxpayer questions every year. Developed over a period of years, the guide is technically accurate, easy to understand, and logically designed.

Originally an unwieldy, ten pound loose-leaf binder, the professional appearance of the guide belies its ability to withstand the duress of daily use. Changes in the guide's accent color reflect yearly revisions, while the use of crack-and -peel sheets allows for updates during the year.

Designed for optimum use in a limited workspace, the guide uses typographic and color coded indicators to help the assistors provide accurate and consistent answers to taxpayers' questions

Before the guide was developed, the assistor had no standard tool from which to work. User participation was an essential part of the design process, in the form of focus groups, special testing, surveys, and questionnaires. Limiting topics to one page wherever possible and providing enough space for the assistor to add comments expedites finding the correct information.

The new IRS Customer Service Guide has resulted in a more productive assistor, better public relations, more accurate and consistent answers. In 1988, the national accuracy rate for technical and procedural questions was 52 percent. By 1994, however, the accuracy rate had risen to 91 percent. In testimony before Congress, the General Accounting Office credited the new guide for the improvement in accuracy.

Credits:

Department of the Treasury, Internal Revenue Service, Taxpayer Services

Cox & Associates, Inc.

Mechanical Brides: Women and Machines from Home to Office

New York, NY

Mechanical Brides: Women and Machine from Home to Office, an exhibition at the Cooper-Hewitt, National Design Museum, critically examined the ways in which people use design to meet practical needs and create cultural identities. Linking the history of design and technology with contemporary research in cultural studies, women's history and sociology, the exhibition's thesis stated that seemingly neutral objects are central to the cultural definition of women's roles.

The curators of the exhibit were faced with the challenge of juxtaposing three-dimensional objects and media images to illustrate the story of women in the ideal American home and office. By examining design from the users' perspective rather than concentrating on production or aesthetic values, the curators successfully reached a wider audience without compromising the museum's intellectual integrity.

The exhibition was divided into three basic sections: the home, the office, and the telephone which linked the two. By presenting the material in a concise manner and in a number of media, the displays provided a number ways for the visitors to enter the exhibit. Using the techniques of modern advertising and environmental graphics, the exhibition stimulated thought and conversation.

Mechanical Brides: Women and Machine from Home to Office gave a vivid, accessible form to the body of feminist scholarship that has been produced on women, work, and design. By linking objects with media images and experiences of users, the exhibition demonstrated the cultural life of industrial design.

Credits:

Smithsonian Institution, Cooper-Hewitt, National Design Museum

Boym Design Studio

Design Writing Research

Mission to Planet Earth Posters

The result of a collaboration between the Corcoran School of Art and NASA, the Mission to Planet Earth poster series highlights the environmentally important images of earth collected by both satellite platforms and the space shuttle. The posters use visually striking images to examine global changes — El Nino, the Ozone layer, the Biosphere, Global Warming, Polar ice, Clouds, and volcanos — currently being discussed in Earth science debates.

Designed to communicate a visual understanding of the Earth sciences through remote sensing data images, diagrams, and text, the posters allow the reader to view the issues surrounding a given problem in their entirety. While one side of the poster diagrams a core scientific concept, the other details why it is being studied from space. The poster format also allows the images to be large enough to reveal important details.

The project itself offered the rare opportunity for design students to work with scientists from both the Goddard Space Center and NASA headquarters and achieve a high standard in visual communications. The Mission to Planet Earth series bridges the gap between technically complex information and the general public, explaining why it is so important to study earth from space.

Credits:

National Aeronautics and Space Administration, Mission to Planet Earth Office

Corcoran School of Art, Graphic Design Department

Modernism at Mid-Century: The Architecture of the United States Air Force Academy

The design and construction of the Air Force Academy represents one of the federal government's largest and most important postwar architectural projects. A through and unique case study of the relationship between the federal government and the design community, Modernism at Mid-Century documents the complex story of the Academy, and how it relates to architectural, military and post war history.

The layout, punctuated with photographs and drawings, provides a coherent and ordered format for the vast amount of information covered by the book's authors. The designers adopted a system of four typefaces set against a broad interior margin to give form to the material. Two and three page sidebars are set against a grey background, making them easy to distinguish from the larger essays.

The designers' visual acuity reflects their genuine interest in the topic. Because so much of the book is a discussion of the international style, the layout had to provide a sympathetic means of presentation. While it would have been logical to adopt a graphic style contemporary with the international style, the designers have used a contemporary format which works with, rather than against, the interpretive voice of the text.

Beyond the initial public reaction to the design of the Air Force Academy, little has been written about this significant federal design project. By presenting this material in a clear and balanced format, the designers have ensured that Modernism at Mid-Century will stand as an exceptional example for other projects aimed at preserving our national design history.

Credits:

Department of Defense, U.S. Air Force, U.S. Air Force Academy, Department of Civil Engineering

The University of Chicago Press

ReVerb

Packaging the New: Design and the American Consumer 1925 - 1975
New York, NY

Examining the evolution of consumer culture in America, the Packaging the New: Design and the American Consumer 1925-1975 exhibition at the Cooper-Hewitt, National Design Museum provoked visitors to think about the objects they buy and why they buy them. The exhibition brought the relationship between the designer, the advertiser and the consumer into focus and explored the results of forty years of consumer consumption in America.

Beginning in the Great Depression, the profession of industrial designer quickly joined forces with manufacturers and advertisers to stimulate the economy. By introducing new products which were made to entice consumers to buy their way to a better life, designers like Raymond Lowey, Walter Dowin Teague, Henry Dryfuss, Norman Bel Geddes and Donald Desky introduced style as the driving force behind consumerism.

The exhibition, divided into galleries, took advantage of existing exhibition cases and stock materials to economically create a space which related to the decade represented. Because theCooper-Hewitt is located in a 1903 neo-Georgian mansion, the designers had the additional challenge of configuring the spaces to prevent the elaborate woodwork and ornamentation of the mansion from competing with the exhibit.

Walking through the corridors of Packaging the New: Design and the American Consumer 1925-1975 visitors had the opportunity to see how they participated in America's obsession with newness and examine the the persuasive power of design.

Credits:

Smithsonain Institution, Cooper-Hewitt, National Design Museum

Alexander Isley Design

Boym Design Studio

Planetary Maps Poster

Planetary mapping by remote sensing has played an integral role in the development of current environmental mapping and global change studies, yet the planetary mapping program of the United States Geological Survey, which has its origins in the Apollo Space Program, remains obscure. By describing the types of planetary maps available from the USGS, the Planetary Maps Poster both outlines the history of planetary mapping and details current uses of remote sensing techniques.

Working closely with the federal employees who served as managers, writers and editors for the project, the designers have created an information resource immediately appealing to an educational audience. The scope of the information in the poster demanded extreme care in layout and design as complex subjects such as extraterrestrial topography and mapping the solar system were presented.

By using the history of planetary exploration as a basis for the poster, the designers have made the material available to a wider curriculum. The Planetary Maps Poster includes information on the technologies used in developing the maps, as well as describing the planets of our solar system in minute detail.

Among the most stunning graphics supported by the American public, the USGS Planetary Maps display both technical sophistication and visual grandeur. The popularity of the poster has brought a relatively unknown national resource to the attention of the American public.

Credits:

Department of the Interior, U.S. Geological Survey, National Mapping Division and the Mapping Applications Center

Chaparos Productions Ltd.

THE POWER OF MAPS
New York, NY

Demonstrating the importance of maps as a form of visual information design, the Power of Maps exhibition at the Cooper-Hewitt National Design Museum also revealed the particular points of view and specific interests behind the creation maps. By providing a critical reading of the process behind map design, the exhibition examined the selective process behind the way in which maps are constructed.

The exhibition arranged more than 300 maps, ancient to modern, into thematic groups. By coordinating the maps with printed materials as well as a video, computer mapping software and a Map Resource room, the curators were able to reinforce the exhibition's message. Current mapping projects were included to show how maps can be used to shape public opinion on environmental, health, and urban issues.

By using a wide variety of maps and related materials, The Power of Maps appealed to a wide audience. The exhibition's achievement can be measured not only in the media coverage and critical success but in the presentation of an expanded version of the exhibition at the International Gallery of the Smithsonian Institution.

Credits:

Smithsonain Institution, Cooper-Hewitt, National Design Museum

Pentagram

Produce for Victory: Posters on the American Home Front, 1941-1945

Designed for display in small rural communities, Produce for Victory: Posters on the American Home Front, 1941-1945 was a response to the Congressional mandate to reach out to previously neglected audiences in America. The low cost, lightweight display is engaging, intellectually rewarding, and sets a new standard for traveling exhibits.

Using design parameters developed by the Smithsonian Institution Traveling Exhibition Service (SITES), the Smithsonian's Office of Exhibits Central created a display with the look of a Smithsonian product and the advantages of a trade-show exhibit. The show is durable, portable, and at the same time elegant and clean.

The exhibit consists of fifty panels, fifty-five connectors, and a banner thatships in six wheeled crates. Construction drawings—including isometric, plan and elevation views—show the exhibitor how to install the displays. The graphics include color reproductions of original vintage posters, as well as black and white photographs and World War II objects.

Produce for Victory: Posters on the American Home Front, 1941-1945 involved the exhibitors in all aspects of the project, from the choice of topic to final design. The result is a blueprint for future exhibits in the same format, three of which are currently being developed by the Smithsonian's Office of Exhibits Central.

Credits:

Smithsonian Institution, Office of Exhibits Central

Publication Design at the National Gallery of Art: A Selection
Washington, DC

In helping to carry out the mission of the National Gallery of Art and support the gallery's programs, the publications of the National Gallery of Art disseminate information to the general public, provide faithful color reproduction of an artist's work, contribute to scholarly research, and serve as a record of the gallery's temporary exhibitions and permanent collections. Publication design at the National Gallery of Art: A Selection documents how the gallery has committed itself to the advancement of design standards.

Within the restrictions of tight deadlines and limited budgets, the National Gallery of Art produces twenty to twenty-five major publications every year. A sample taken from works printed during the last four years illustrates the gallery's commitment to producing printed materials that are appropriate to to the works of art they exhibit. Carefully considering each element of the design as it relates to a specific group of objects, the gallery brings together word and image in a clear and interesting manner.

Constantly working to improve the publication process, the gallery has significantly updated their electronic publishing capabilities, resulting in increased efficiency, improved quality control, and significant cost savings. Publications continue to be completed on time and within budget. The success of the gallery's work can be measured in high catalogue sales, excellent teacher evaluations and positive reviews from the press and the gallery's many visitors.

Credits:

National Gallery of Art, Editors Office

Design Pur

Bruce Campbell Design

Three Communication Design

Grafik Communications, Ltd.

Revolution, Life and Labor: Soviet Porcelain
New York, NY

The Ludmilla and Henry Shapiro collection of Soviet Propaganda porcelains, housed at the Cooper-Hewitt, National Design Museum, is the only one of its kind in the United States. Consisting of two hundred and fifty plates, vessels and figurines, the collection brilliantly documents the major themes and motifs important to Soviet design between 1917 and the mid 1980's.

In 1992, the Cooper-Hewitt introduced the Shapiro collection to the American public with an exhibition, Revolution, Life, and Labor: Soviet Porcelains 1918-1985. As a companion to the exhibition, a catalogue featuring some of the most important pieces from the collection also was published. The research for this catalogue was done by the exhibit's curator and colleagues in Russia and represents a significant cooperative effort in the study of Soviet design.

Because the budget of the catalogue would not allow for every piece to be illustrated in color, the curator, designer, and printer worked closely together to design a catalogue, with a limited use of color, which conveys the strength and importance of the porcelains. An introductory essay provides historical background for the porcelains and discusses their artistic, social and political significance.

The historic nature of the material in Revolution, Life, and Labor: Soviet Porcelains 1918-1985, its political significance, and its artistic strength are shown without compromise and reflect the achievement of everyone involved in the design of the catalogue.

Credits:

Smithsonian Institution, Cooper-Hewitt, National Design Museum

Pentagram

A Royal Gift: The 1862 Porcelain Jewel Cabinet

New York, NY

The goal of the exhibition A Royal Gift: The 1862 Porcelain Jewel Cabinet was to focus on one extraordinary object from the Cooper-Hewitt, National Design Museum's permanent collection. By inviting visitors to enjoy the aesthetic experience of the jewel cabinet and related objects, the curators have presented a fascinating study of both the cabinet and the design process that produced it.

The central object in the exhibit was a six-foot-tall jewelry cabinet made at the Sevres factory in Paris during the 1820s. Presented by King Charles X of France as a state gift to King Francis I of the two Sicilies, the cabinet is composed almost entirely of large painted porcelain plaques held in an ornate gilt-bronze framework. The exhibition also included forty other objects, all made in Paris during the 1820s ranging from porcelain table wares, silk textiles, wallpapers and fashion prints, to jewelry, buttons and fans .

The exhibition focused on four main avenues of design exploration for the cabinet: Historic Context, Craftsmanship, Function and Fashion, and Image and Interpretation. The cabinet and other objects were arranged thematically around these topics. A central, faceted kiosk presented introductory information using both text and images.

A Royal Gift: The 1862 Porcelain Jewel Cabinet included a free handout composed of a post-card size box that opens to reveal six cards, each illustrating a part of the cabinet on one side and a written description on the other. This type of small, inexpensive, in- house exhibition featuringthe Cooper-Hewitt's collections serves as a model for future programs.

Credits:

Smithsonian Institution, Cooper-Hewitt, National Design Museum

Carbone Smolan Associates

SPIDERS!
Washington, DC

Given the mission of bringing a "better understanding of basic spider biology and spiders' indispensable role in maintaining our ecosystem" to the American public, the designers of the National Museum of Natural History's SPIDERS! exhibit were faced with a big challenge. Using visual and participatory design elements, they succeeded in creating a playful and dignified entreaty for spiders and their impact on the environment.

Designed as a 5,500 square foot traveling exhibit, SPIDERS! had to last through ten venues and anticipate the problems associated with transportation by truck. The exhibit withstood not only the demands of moving from site to site but the traffic of 800,000 visitors over the course of six months at the Museum of Natural History.

The design team brought text, visuals and interactive displays together in a meaningful way. While not overwhelming to the average visitor, the material was scientifically accurate and presented the dangers spiders can pose to human beings, as well as the harm done by an unreasonable fear of these insects.

The exhibit breaks with the tradition of didactic natural history displays and presents its subject in an upbeat but serious tone. The designers of SPIDERS! took special interest in appealing to younger visitors, and a companion "Spider Lab" — a staffed, hands-on exhibit area — was especially designed for children under the age of 12.

Credits:

Smithsonian Institution, Office of Exhibits Central

United States Holocaust Memorial Museum Artifact Posters
Washington, DC

The Holocaust Museum's primary mission, as a national educational institution, is to educate the American public about the history of the Holocaust and its implications. Using materials supplied by the museum, the United States Holocaust Memorial Museum Artifact Posters present a wealth of information on the complicated issues relating to the history of the Holocaust and provide an important new resource for study.

The goal of the project was to create materials that could be used as supplements to a fully developed curriculum. Designed for a broad range of students—from middle school to the college level—this set of nine posters provides unique background information on the Holocaust using artifacts, documents, and photographs from the museum's collection.

Additional materials include a set of caption cards and a teachers guide. Carefully designed to complement each other and promote student inquiry, the additional materials provide historical background, suggestions for further readings, and questions for classroom discussions.

Successful design is often the result of interdisciplinary collaboration. In this case, the project began with input from teachers as to what format would be most appropriate to present specific themes from the Holocaust. After the poster format was chosen, the designers worked closely with experts and researchers on the museum staff, allowing them to use the most appropriate and effective materials for the posters.

By making the resources of the Holocaust Museum available to students across the country, these posters have made a significant contribution to design. While the Holocaust Museum may be physically grounded in Washington, DC, the lessons it contains are not.

Credits:

United States Holocaust Memorial Museum, Education Department

Pat Taylor, Inc.

Adina Conn & Associates

United States Holocaust Memorial Museum Permanent Exhibition Design

Washington, DC

The most difficult task of the design within the Holocaust Museum was to engage visitors in the subject matter. The exhibition designers had to avoid pitfalls such as sensationalizing or trivializing the subject without upsetting or lecturing the visitors. The success of the museum can be measured by the public's reaction to it. During the first year, 1.3 million people visited the permanent collection staying for three hours, twice the average museum visit.

Focusing on individuals within the larger context of the Holocaust, the designers have created a restrained presentation, taking into account individual tolerance levels, and limiting younger visitors from overwhelming experiences. Within this context, the designers successfully integrated 2,500 photographs, 1,000 artifacts, 53 video monitors, 30 interactive stations, and three video projection theaters.

Due to scheduling constraints, the entire project was completed in half the usual time. Coordinating with the architect allowed the exhibition designers to modify the architectural space even after the construction drawings were complete. Design development and fabrication also overlapped with approximately 200 square feet designed every three weeks and built within the following two months.

By confronting moral issues in American history and creating a new paradigm for museums which integrate architecture and exhibits into a total experience, the museum has significantly advanced design. Already a number of cultural history facilities dealing with issues of ethics and values, using the model of a storytelling walk-through, have emerged across the country.

The close working relationship between the museum designers and the United States Holocaust Memorial Council, the federal organization resulting from the legislation authorizing the museum, allowed the designers to work through several difficult agendas. The result was the unusually rapid development of a remarkably successful federal design project.

Credits:

United States Holocaust Memorial Museum

Ralph Applebaum Associates Incorporated

Prisoners of Time Report

On January 30, 1991, Senator Jeff Bingaman of New Mexico introduced legislation to create a National Education Commission on Time and Learning. On June 27, 1991 the Education Council Act of 1991 was signed into law. The following April the Commission began the work which culminated in the report, Prisoners of Time.

Visually compelling, the designers created a report which goes well beyond the standard white paper format typically used for this kind of document. By turning abstract concepts into effective visuals, the report, which deals with the time constraints put on students as they learn, has reached a broad and diverse audience.

Taking advantage of current electronic communication, imaging, and printing technologies, the report was produced in an efficient, cost-effective manner, allowing the commission to understand exactly how the report would appear, before it had been sent to the printer..

The success of the report can be measured in the breath of its circulation. Distributed widely throughout the United States, the report has also been sent to France, Germany and Japan. More than 2000 articles about the report have appeared since its publication including articles in the New York Times, the Wall Street Journal, and the Washington Post.

Credits:

Department of Education, National Education Commission on Time and Learning

Carter/Cosgrove and Company

HISTORIC PRESERVATION

Byron White United States Courthouse
Denver, Colorado

The preservation of the federal courthouse/post office in Denver illustrates a strategy that combines a deep respect for the past with the thoughtful integration of totally new uses. This Beaux Arts monument was completed in 1916 to house the District and Appellate Courts, the main Denver Post Office and all other federal agencies in Denver. While the interior was inevitably eclectic, the exterior was clad in marble and boasted a front facade with a portico composed of 16 three-story ionic columns with American eagles spreading their wings over each scroll of the capitals. Due to a series of "remodelings" in the 1950s and 1960s, much of this grandeur was lost. A massive shed was constructed along one side of the building for cooling towers, hung ceilings were installed in many spaces, and large rooms were partitioned into smaller offices. By 1966, all courtroom functions had been relocated to other facilities and the post office took ownership of the entire building.

Only in 1988—at the urging of a Judges' Restoration Committee—was the structure rescued from its pragmatic demise through re-acquisition by the General Services Administration for the sole use of the federal courts. In this renaissance, building systems were replaced, and the exterior and certain public rooms were restored to their former elegance. In a rehabilitation/redesign component of the program, several brand new spaces were added to the interior.

On August 10, 1994, the building was rededicated as the Byron White United States Courthouse. With a new name and new life, it exemplifies an innovative model for preserving this country's important legacy of distinguished federal buildings, while updating them to contemporary uses.

Credits:

General Services Administration, Rocky Mountain Region

Michael Barber Architecture

Rehabilitation of the Old State House

Boston, Massachusetts

Constructed in 1713, this building is a small jewel of Massachusetts and American history that has survived numerous transformations. Originally the seat of colonial government, the Old State House has served as city hall, commercial center, and the venue for state government. Its charred roof beams attest to damage from several fires, and in the early twentieth century, two floors were raised to accommodate subway construction. Since 1881, the structure has been maintained by the Bostonian Society as a museum of Boston history.

In 1987, the city and the National Park Service decided the landmark needed a major restoration. But in a building with many lives, what is the appropriate restoration strategy and to what extent can contemporary technology and accessibility standards be introduced? Responses to these questions came from a team of specialists who determined the best approach would: 1.) maintain the overall integrity of the original design, 2.) enhance the current use of Old State House as a museum, and 3.) subtly acknowledge the building's rich history. To these ends, brick and woodwork as well as the decorative Royal Lion and Unicorn symbols were restored, air conditioning and a sprinkler system were unobtrusively installed, lifts were incorporated to provide first-floor access for wheelchair-bound visitors, an 1830s clock was remounted on the facade, and interiors were refurbished to demonstrate how, over the past 110 years, the colonial rooms had been "restored" in three very different ways. It was a complex job handled with sophistication and good judgment, respecting the past and providing for the future. Thus, as the Old State House completes three centuries of service, it remains an example of living architecture.

Credits:

Department of the Interior, National Park Service; Denver Service Center, the North Atlantic Region and the Boston National Historical Park

Goody, Clancy and Associates, Inc.

The City of Boston

The Bostonian Society

A.J. Martini, Inc.

Spreckels Temple of Music
San Francisco, California

In a few years, people will be making plans to celebrate the centennial of the Spreckels Temple of Music as an elegant Beaux Arts backdrop for outdoor music performances and civic events in Golden Gate Park. Not all that long ago, however, it wasn't certain that would be the case. Designed in 1899, this home for Opera in the Park and Sunday Band Concerts was damaged during the 1906 earthquake and repaired, and then damaged again in the 1989 Loma Prieta quake. After this last disaster, it was fenced off and went unused for more than four years. There was concern the brick and terra-cotta band shell would not survive another seismic jolt, and pairs of columns—which in plan extended more than 50 feet to either side of the stage—shifted noticeably from their original positions.

In 1990, a combination of federal and local funds became available to repair and stabilize the Temple. But there was a dilemma: should the sandstone columns, which needed to have their cores drilled and strengthened with reinforced concrete, be dismantled and rebuilt, or should this work be implemented in place. The columns also needed re-plumbing and re-centering as they had shifted. After significant debate, the latter, preservation-sensitive approach was chosen, and the contractor completed the upgrade without causing further damage. Other improvements also were executed, including reinforcing the dome of the band shell, adding a new roof slab and refurbishing details of the building.

On July 3, 1994, Spreckels Temple of Music once again re-opened. Visibly, the exterior has not changed. But within, a new structural skeleton provides assurance that people will be enjoying this civic landmark as it gracefully crosses the threshold into the twenty-first century.

Credits:

Federal Emergency Management Agency, Region IX

The City and County of San Francisco Bureau of Architecture

Cygma/Olmm/Pegasus

Carey & Company

Wiss Janney Elstner Associates

Page and Turnbull

INDUSTRIAL AND PRODUCT DESIGN

60K Loader Cab Interior

Organizing and positioning more than 100 interface items, the 60K Loader Cab Interior meets the needs of a variety of operators in a tightly restricted workspace. The 60K, an aircraft loader built for the U.S. Air Force, requires an ergonomic cab space that supports safety, comfort and ease of use, while working within the restrictions of a predetermined cab size. By adopting a participatory process, the design team met the needs of both the user and manufacturer from the very beginning of the project.

Because the cab interior was developed during the Persian Gulf War, the designers were forced to work with limited time in the field and limited access to users. Team members used interviews, photographs and videotapes to assess the problems with current aircraft loading equipment.

While the aircraft loader had been designed to operate like a truck, with the user looking out the front window, the design team discovered that users spent more than 70 percent of their time looking out the right side window.

Developing an ergonomic model where all the components could be adjusted, the designers were able to produce a preliminary solution which accounted for problems such as visibility. Because all the controls were adjustable within this model, input from both engineers and user-advocates could be accounted for immediately. Moving from the preliminary model to full scale CAD drawings, the design team then incorporated input from the vendor who would manufacture the cab.

The innovative product development process allowed input from users, designers, engineers and manufactures to be incorporated into the 60K Loader Cab Interior with a significant reduction in development costs. Because re-configurations were not limited during the design phase, the team was able to produce a superior product which effectively and economically meets the needs of the Air Force.

Credits:

Department of Defense, U.S. Air Force, System Program Management

Fitch, Inc.

Teledyne Brown

Amtrak AMD-103 Passenger Diesel Locomotive

The first locomotive specifically designed for passenger service in over 40 years, the Amtrak AMD-103 Passenger Diesel Locomotive incorporates new safety, modeling and environmental and operating features. Because the locomotive meets maximum weight allowances and universal clearances, it can operate on any route of the Amtrak national railway system.

Using a lightweight, streamlined aerodynamic car body, the locomotive can reach a maximum speed of 103 mile per hour. Integrating the fuel storage tanks within a new structural system, the designers removed five tons of dead load and raised the height for the tanks from eight inches above the rail to 21 inches above the rail. By using the structural beams as walls, the thickness of the fuel tanks was increased threefold.

The design process included extensive user consultation. Officials within the Federal Railway Administration, the National Transportation Safety Board, the Association of American Railroads, the Transportation Research Board, and the Brotherhood of Locomotive Engineers were all consulted to review the design for operating comfort, visibility, crashworthiness, and occupational safety.

With the diesel engine's new design and a 33 percent increase in horsepower, the Amtrak AMD-103 Passenger Diesel Locomotive has had an average 20 percent savings in fuel consumption. As fuel costs contribute significantly to the cost of Amtrak service, the locomotive plays a significant role in reducing the growth rate of Amtrak's federal operating grant.

Credits:

Department of Tranportation, Federal Railroad Administration

National Railroad Passenger Corporation, Office of Engineering/Mechanical Services

General Electric Transportation Systems

Backpack Personal Cooling System

The Backpack Personal Cooling System, a lightweight, form fitting and low profile unit demonstrates the results of a unique partnership between the design community and the federal government. Using technologies developed for race car drivers, the cooling system was designed for soldiers using chemical weapon ensembles in the Persian Gulf. This new design, in turn, is being considered for several civilian applications.

Working with the project's program manager, the design team surveyed previous cooling system designs and field test data. Knowledge of problems in earlier projects let the design team incorporate new concepts, like mobile modularity, into the backpack. Rather than having to return to a repair station, the modular design incorporated into the cooling system allows the user to remove the battery or the refrigeration section without tools in as little as 10 seconds.

The project fulfills two important goals for the Department of Defense. First, the Backpack Personal Cooling System contributes to the department's development of the most technologically enhanced soldier in the world. Conflicts, such as the Persian Gulf War, where the threat of chemical weapons existed, make this kind of enhancement essential. Second, the project is aligned with government programs intended to move Department of Defense technologies to the commercial sector.

Credits:

The Department of Defense, U.S. Army, Army Natick Research, Development and Engineering Center and the U.S. Army Soldier Systems Command

Carlson Technology Incorporated

INTERIOR DESIGN

Exhibition Design at the National Gallery of Art: A Selection
Washington, DC

The department of Design and Installation at the National Gallery of Art designs and installs from fifteen to twenty-five major special exhibitions each year. The nine exhibitions submitted, dating from the years 1991-1994, were selected to represent the range, diversity and quality of installations achieved. Over the past twenty-five years the department has designed over 300 exhibitions and through its innovative achievement has been recognized as one of the world leaders in museum installation design.

Museum policy mandates that each exhibition be experienced in a setting appropriate to the aesthetic, art historical, and architectural approach to installation design. The results of this approach are as varied as the themes of the exhibitions and the works of art they contain. Using the extraordinarily flexible spaces in both the modern I.M. Pei East Building and the neo-classical John Russell Pope West Building, the designs and their educational dimension engage the visitor in a dialogue between objects and ideas. The visitor moves through spaces that are specially detailed to reflect the concepts of the exhibition.

Many of the exhibitions represented in this selection used innovative lighting technology such as fiber optics, as well as state of the art conservation environments for particularly fragile pieces. All exhibitions at the National Gallery are designed for accessibility to the widest possible public, with special attention given to pedestal heights, label sizes, and adequate lighting. Given the current economic climate, efficiencies in building techniques as well as the recycling of cases and architectural elements has become an integral part of the design process. Incorporating economy, technology, accessibility and a strong underlying didactic theme has placed exhibition design at the National Gallery of Art in the forefront of its field.

Credits:

National Gallery of Art, Design Department

Freer Gallery of Art: Restoration and Reinstallation
Washington, DC

The Freer Gallery of Art, known for its fine collection of Asian and American art, had not undergone any major renovations since its opening in 1923. In the intervening years, the building's systems and general appearance had slowly deteriorated, and curatorial, technical and visitor requirements had changed significantly. To address these problems comprehensively, the museum was closed to the public in 1988 in order to update the systems, refurbish 25,000 square feet of public space, and reinstall all 20 galleries of exhibits.

The objective was to maintain the character and spatial qualities of the Italian Renaissance-style structure while creating a truly modern facility. Plaster walls were removed and replaced with more durable and easily repaired materials. The building's 1,550 skylight units were redone with glazing that reduced harmful emissions and minimized seasonal changes in illumination. Spotlights were installed to emphasize individual works of art.

Another major facet of the project was to develop an exhibition case that was both more secure and easily accessible. The result—which has attracted the interest of curators from around the world—is a beautifully crafted walnut cabinet base built around an aluminum frame with dust-proof glass tops that are raised and lowered on treaded stainless steel supports. Other refinements to the interior include new corridor lighting fixtures that show off the vaulting of the hallways, a graphic design strategy that covers everything from signage to brochure panels, a revised gallery color scheme, and the restoration of the museum's courtyard and landscaping to the design originally proposed. Overall, the modifications might be characterized as subtle but important improvements. They came in under budget, and since the Freer reopened in 1993, have helped to improve the reputation of the gallery and attract almost double the number of visitors.

Credits:

Smithsonian Institution, Freer Gallery of Art and Arthur M. Sackler Gallery and the Office of Design and Construction

National Postal Museum

Washington, DC

If the idea of a postal museum conjures up images of tweezers and magnifying glasses, be prepared for a surprise. This lively gallery is located in the atrium of a landmark building that has been renovated for use as 850,000 square feet of prime federal office space. The street entrance moves through a grand Beaux Arts lobby and down escalators to a courtyard occupied by a horse-drawn carriage, a railroad mail car, and a couple of suspended airplanes. Visitors can actually use the full-service post office that is part of the design, research a particular question in the library and special collections area, or wander through exhibits ranging from "Moving the Mail" to "Customers and Communities" to "Stamps and Stories."

All around are architectural elements that recall materials and systems related to the post office. The ceiling over the escalators is embossed with graphics and perforations that mimic a sheet of stamps. Metal frames and trusses refer to gallery catwalks above sorting rooms and the conveyor systems used to move mail. Railings are detailed as cancelation marks. In addition, there is an abundance of historic photos, postal artwork and post office paraphernalia.

The merit of this scheme, however, goes beyond the quality of the museum itself. Here is a gallery—a part of the prestigious Smithsonian Institution—that, because of its location in a major office biulding, becomes an integral part of everyday life. The exhibits contribute a unique dynamic to a traditional building program. This is a museum people can actually enjoy on their way to work. Clearly, we could use more of this kind of design investment.

Credits:

United States Postal Service, National Postal Museum

Smithsonian Institution, National Postal Museum

Hines Interests Limited Partnership

Florance Eichbaum Esocoff King Architects

Miles Fridberg Molinaroli

Washington Monument Entry Level Lobby Renovation

Washington, DC

In design, little things really do mean a lot. Looking at size and budget alone, the Washington Monument Entry Level Lobby Renovation is quite modest. In terms of impact, however, this restoration/interior project greatly enhances the character and quality of one of the nation's most familiar landmarks. The commission was to develop the Washington Monument's entry lobby—an area which had been modified at various times since opening in 1888—in a way that was more respectful of the historic and symbolic significance of the space.

At the East Portal and West Chamber, hung ceilings and marble wainscotting were removed to reveal the full height and original dressed marble walls of these impressive spaces. Then, blending art and architecture, the West Chamber was used as the setting for a life size bronze statue of George Washington. In the South Corridor waiting room, the 1904 marble details were cleaned, new light fixtures installed, and the walls adorned with bronze garlands in a motif recalling designs from Mount Vernon. Finally, an Egyptian-styled limestone surround as well as bronze doors and a bronze relief sculpture were used to distinguish the elevator as a monumental gateway. The overall effect is a processional with sense of awe and quiet reverence that makes a lasting first impression as the entry to this treasured monument.

Innovative historical research was done to evaluate the feasibility of all these changes. Fiber optic cable and a video camera were used to get a "picture" of the space behind various material layers to determine the condition of finishes and how to remove them, and make sure modifications would in no way compromise the integrity of the structure.

Credits:

Department of the Interior, National Park Service, Division of Exhibits, Harpers Ferry Center

Notter + Associates, PC

Skylight Studios, Inc.

LANDSCAPE ARCHITECTURE

ARIZONA INTERSTATE REST AREA PROGRAM
Arizona

Recognizing that the rest areas along Arizona's interstate highways had reached the end of their life cycle of providing safe, comfortable and relaxing settings for travelers, the Arizona Department of Transportation saw an opportunity to develop rest areas that would be attractive, safe and informative. They invited a team of landscape architects, artists, architects, engineers, and tourism experts to create unique, user-friendly sites.

Several principles guided the designers: the rest areas should serve as "tourism ambassadors" of the state; traveler safety and security were paramount concerns; and minimizing the costs of maintenance and opportunities for vandalism was crucial.

Individual rest stop designs draw upon the remote desert landscape and provide opportunities to demonstrate innovative approaches to sustainable and responsible design, such as passive cooling systems and arid site landscaping. The remote locations also made traveler safety a prime concern. Care was taken to ensure that bathrooms were visible from the parking areas, as well as to the highway patrol.

Information displays and welcome centers allow the traveler to learn more about the area and make plans to visit attractions, improving the state's tourism. Recent traveler polls at the new rest areas confirm that they have achieved a unique balance incorporating aesthetic appeal, functional practicality and environmental sensitivity.

Credits:

Department of Transportation, Federal Highway Administration, Region 9

Arizona Department of Transportation, Roadside Development Section

Cella Barr Associates

Charles Robert Schiffner Architects Ltd.

Dorst Campground
Sequoia/Kings Canyon National Park, California

The reconstruction of this 1930's campground and picnic area to contemporary camping styles was accomplished economically and with great sensitivity to this historic place. Built by the Civilian Conservation Corps during the Great Depression, Dorst Campground was rebuilt to mitigate the impact of development from the park's Great Forest, protecting the treasured giant Sequoia trees. The number of campsites was increased by 80, to a total of 240, with nearly half of the sites reserved for recreation vehicles. Despite this enormous growth, the site does not feel crowded due to carefully placed native stone retaining walls. Dorst designers decided to separate the three distinct camping styles: recreational vehicles, tent campers, and walk-in campers. The more primitive areas are situated away from vehicular traffic.

Natural materials were used in a functional and aesthetic manner. Circulation was improved to reduce vehicle impacts on vegetation and camps. Details and the alignment of new roads enhance drainage and the visual quality of the roadscape. A new bridge of rustic design recalls an earlier time when only natural materials were used in remote parks out of necessity.

Site impacts by campers were reduced by paving vehicle routes and containing traffic where necessary with stone curbing. Since the integrity of the natural vegetation was a major concern, erosion control blankets were used on slopes and drainage courses rather than seeding with commercial grasses.

Members of the design team, all of who were experienced campers, ably demonstrated their appreciation for the past, knowledge of campers aesthetic and physical needs, and technical virtuosity in this project. The project demonstrates that the National Park Service can upgrade the function and utility of existing park facilities for a growing population without losing the qualities that made this environments memorable for previous generations.

Credits:

Department of the Interior, National Park Service, Denver Service Center, and the Sequoia/Kings Canyon National Park

Department of Transportation, Federal Highway Administration

ENID A. HAUPT GARDEN
Washington, DC

The Smithsonian Institution's Enid A. Haupt garden ties together three disparate historic landmark buildings – the Smithsonian Castle, the Victorian Arts and Industries Building, and the neo-classical Freer Gallery of Art. All are linked by a 4.2 acre site, which also includes the entrance pavilions to the underground quadrangle complex housing the Arthur M. Sackler Gallery of Asian Art, the National Museum of African Art, and the S. Dillon Ripley Center. The design creates a composition of delightful garden rooms, each with a distinct image and character. Together, they combine to form a sophisticated public garden that is intimately scaled and well detailed, in the tradition of grand estate gardens of America and Europe.

Formerly a parking lot, the garden achieves a remarkable reconciliation of opposing and conflicting elements through a unifying theme of symmetry, balance, texture, and proportion. The plantings in each area reflect the different typological origins of the garden rooms—a brick-walked Victorian Garden leading from the street to the Castle; a peaceful Oriental garden with moon gates and circular island by the Sackler; and a lively Islamic garden with bubbling fountains adjacent to the African Art museum.

Utilitarian structures scattered around the site, including stair towers, large skylights, exhaust vents and a loading dock, are unseen to visitors, due to the carefully arranged plantings and garden walls.

The Haupt garden exemplifies the capacity of landscape architecture to connect and enhance disparate visual elements through unifying forms and elements.

Credits:

General Services Administration, National Capital Region

Smithsonian Institution, Office of Design and Construction

Shepley Bulfinch Richardson and Abbott

Sasaki Associates

HIRSHHORN MUSEUM PLAZA
Washington, DC

Working with a complex site that had become badly worn and had never successfully addressed its monumental centerpiece, Gordon Bunshaft's 1974 circular museum, landscape architect James Urban created an oasis. The 2.7 acre plaza is now not only technically more functional but also a pleasant shady spot for weary visitors to contemplate the museum's renowned sculpture collection.

With a clear sense of respect for the integrity of the original design, Urban retained the symmetry of the site, including Bunshaft's circular fountain in the plaza's center, and the focus on geometry. Key to the success of the design was the decision to add greenery to the outside quadrants. Areas of planting and low walls subdivide spaces into smaller units to create "rooms" for the sculpture, representing a total shift in the concept of how visitors use the space. These garden areas are defined by rows of trees, lawns, gentle slopes, benches and granite rises that also provide seating.

The plaza actually serves as the roof for the museum's lower level. The structural, mechanical, waterproofing, drainage and grading work were crucial to the performance of the building, and all the more impressive since the improvements remain invisible to plaza users. A granite paved walkway circumnavigates the site, making the sculptures accessible to visitors in wheelchairs.

The Hirshhorn plaza gracefully and sensitively relates with the museum while immensely improving the relationship between visitors and the monumental building through the addition of a mid-scale of trees and greenery.

Credits:

Smithsonian Institution, Office of Design and Construction and the Hirshhorn Museum and Sculpture Garden

Cannon/Faulkner

Interstate 90 Completion Project

Seattle, Washington

The Interstate 90 Completion Project demonstrates that through careful planning and creative application of landscape design, a highway can knit communities together rather than tear them apart. The seven-mile multi-modal transportation corridor includes 200 acres of park and roadside development, 12 miles of bicycle/pedestrian trails, 31 acres of landscape development on lid structures, and four acres of new wetlands in three urban communities.

The old I-90 freeway separated communities with a broad expanse of pavement, noise and vehicular pollution. Now, the communities have been physically and emotionally reconnected by lowering the roadway to reduce its visual and noise impact by using wide, landscaped bridge structures and lids to cover the freeway with park space. The new open spaces created by the lids and bridges now contain parks, tennis courts and ball fields that literally bring the residents together.

The project is the result of vision, perseverance and design excellence by landscape architects, artists, civil and structural engineers, and countless citizens and public leaders who were involved in more than 30 years of planning, design and implementation.

Technical excellence is demonstrated in the innovative use of the lid structures, which crown the lowered highway. The lids greatly reduce the traffic noise, and cover the visual impact. Key issues for transforming the lids into parks included soil depth and type and structural limitations. Irrigation systems were designed to provide plants with moisture during summer droughts, and an innovative computer system automatically adjusts watering frequencies.

Aesthetic excellence also abounds. The planners coordinated features, such as wall configurations and treatments, signage and illumination, to ensure consistence and continuity throughout the corridor. Wide landscaped medians and planting pockets within the lowered roadway provide delineation of traffic and tie the project to the surrounding environment. Viewpoints were created of the floating bridges, Lake Washington and the Cascade Mountains. Plantings of Japanese Maple, Black Pine Dwarf Winged Euonymous and English Ivy create an attractive, low-maintenance landscape.

In summary, the Interstate 90 Completion Project successfully provides creative solutions to multiple design issues. It makes and maintains pedestrian connections between existing neighborhoods and is a model for collaboration and coordination of an extremely large and complex project.

Credits:

Department of Transportation, Federal Highway Administration, Washington Division

Washington State Department of Transportation

Al Mathews Corporation

[continued next page]

Arnold & Arnold Associates

Alpha Engineering Group

Burke Associates

CH2M HILL

Converse Consultants

Entranco Engineers

Figg and Muller Engineers, Inc.

Fluor-Daniel

HDR Engineering, Inc.

HNTB Corporation

H. W. Lochner, Inc.

Hart Crowser & Associates

Jongejan/Gerrard/McNeal

KPFF Consulting Engineer

KCM Incorporated

Morrison-Knudsen Engineers

N.G. Jacobson & Associates

Systems Architects-Engineers

Sverdrup Corporation

TAMS Consutants, Inc.

Tudor Engineering, Co.

URS Company

Wilsey & Ham Pacific

Lee, Kobayashi & Burke

Jones & Jones Architects and Landscape Architects

Olympia Associates Company

Kenilworth Marsh Restoration

Washington, DC

Kenilworth Marsh is the last remaining freshwater tidal wetland in the District of Columbia. Massive urban development, storm water runoff, sedimentation and years of neglect had reduced the once expansive marsh to barren flats at low tide. It was clear that the marsh needed to be restored and kept navigable, while transforming the mud flats into functioning wetlands.

Restoration of the marsh was facilitated thanks to an unusual degree of inter-governmental cooperation between the National Park Service, the U.S. Fish and Wildlife Service, the Army Corps of Engineers, the Metropolitan Washington Council of Governments, and the District of Columbia Department of Public Works.

Wetlands form an integral part of the watershed's self-cleansing system. They serve as biological filters for the silt, nutrients, and pollutants that wash down from thousands of sources. In addition they help reduce riverbank erosion and flood damage; improve water quality; and provide essential habitat for fish and wildlife. One measure of the success of this project is the dramatic increase in marsh flora and fauna. Before the restoration, you could count the number of snowy egrets on one hand, today they number close to 100.

A major innovation was the first application in the nation of water tubes and straw bales to contain the dredged material. Such appropriate low-technology solutions kept the costs low and avoided the use of heavy equipment that might disturb the habitat. Canals were cut into the restored marsh to enhance tidal water flow and to allow canoe passage into the area.

Credits:

Department of Defense, U.S. Army, Corps of Engineers, Baltimore District

Metropolitan Washington Council of Governments

Biohabitats, Inc.

Cottrell Engineering Corporation

Chris Athanas & Associates, Inc.

Loess Hills Scenic Byway

Western Iowa

The Loess Hills region of Western Iowa is a unique geologic landform comprising 640,000 acres and spanning seven counties. What began as a local attempt to boost tourism and economic development in the region turned into a nationally significant program that involved hundreds of volunteers from the area and led to tremendous tangible and intangible results. The former is demonstrated by a nearly 250 percent increase in tourism, and the development of a new organization—The Loess Hills Alliance—to preserve and protect the future of the region. The latter is best characterized by the new-found pride residents have discovered thanks to their role in surveying and researching the area.

The project literally began from scratch, since the state did not have a scenic byways program. Staff from the USDA's Soil Conservation Service created a program that relied heavily on local residents. They developed an innovative scenic route selection process specifically tailored to rural Iowa. It employed techniques, such as visual resource inventories, overlay mapping and public polling, as well as computer visual simulation. Volunteers were trained to collect data on potential routes. Services were inventoried along these routes, as well, to determine the suitability to serve visitors.

During the project, more than 140 volunteers logged over 1100 hours and hundreds of miles on their own vehicles. Fresh from their new-found appreciation for their landscape, residents undertook a large scale landscape resource study that inventoried the natural, cultural and historic resources of the entire area.

What results is a model program to establish scenic byways based on citizen involvement. Through the strong participation of volunteers throughout the process, the project ensured that residents would be the best ambassadors for their land, setting the stage for implementation and management of the region's future planning and design.

Credits:

Department of Agriculture, Natural Resources Conservation Service, Iowa State Office and the Midwest National Technical Center

National Endowment for the Arts, Design Program

Golden Hills Resource Conservation and Development

Sentinel Bridge
Yosemite National Park, CA

Tastefully restrained, defines the design approach to this functional, unobtrusive bridge. This structure enhances its setting and introduces an attractive man-made element that interacts with the spectacular views in the Yosemite Valley. Sentinel Bridge spans the Merced River with a shallow post-tensioned concrete arch, a form that offers reflections uninterrupted by piers, which further adds to the surrounding mountains and dignifies the sense of crossing. Granite facing echoes the natural materials of the mountains.

The parking area is partially screened from the road. Large granite boulders located throughout the area help direct pedestrian traffic and provide seating while visitors wait for the shuttle bus.

The approaches and parking areas are integral parts of the design. Whether on foot, horseback, bicycle or automobile, the traveler can conveniently cross over the river, reveling in one of the grandest views of Half Dome. The design of the bridge successfully solves the problem of functional crossing and special viewing place. In particular, the extra-wide sidewalks on either side of the bridge enable photographers, pedestrians, and wheel-chair users to reflect on the natural beauty of the site without impeding the passage of others.

The National Park Service has recognized that design excellence of functional structures can accentuate the experience of the park for visitors.

Credits:

Department of the Interior, National Park Service, Denver Service Center

Department of Transportation, Federal Highway Administration

Sepulveda Basin, Lake Balboa Park and Wildlife Area
Los Angeles, CA

Created in 1941 by the Army Corps of Engineers for Los Angeles County flood control, the Sepulveda Dam and Reservoir have by necessity taken on many other functions as the region's population soared in the post-war years. Approximately two-thirds of the 2,100-acre site are leased to the city Department of Recreation and Parks, which maintains its parks, golf course and playfields. The now urbanized valley supports a population of about 1.5 million with little access to open space.

This project has sensitively balanced the needs of an urban populace for recreation facilities with a wildlife habitat. The wildlife area, with its large pond, oak woodland, and native grasslands, is habitat for more than 200 varieties of local and migratory birds. Trails around the lake offer viewing blinds and open benches for viewing the migratory water fowl in and around the pond. Incorporation of native plant materials combined with innovative water handling treatment strategies has resulted in increased numbers and varieties of wildlife. In addition to creating a wildlife sanctuary, the project established an experiential learning environment for visitors.

A result of a partnership between city and county agencies with the Army Corps, Lake Balboa Park and Wildlife Area has greatly enhanced the community's enjoyment without sacrificing its ecological purpose.

Credits:

Department of Defense, U.S. Army, Corps of Engineers, Los Angeles District

Brockmeier Consulting Engineers, Inc.

URBAN DESIGN AND PLANNING

Augusta Canal Master Plan
Augusta, GA

The Augusta Canal system winds its way through a wilderness corridor, developing three separate branches that traverse historic neighborhoods and urban landscapes, before flowing back into the Savannah River next to Augusta's historic but struggling downtown. Mandated by the National Park Service and the U.S. Department of Transportation, the master plan identifies actions to preserve and interpret the historic but endangered canal and its related resources.

The process to create the master plan proved a catalyst for the entire city of Augusta, bringing together previously divisive factions with the unified vision of a revitalized community. At the outset of the study, there was significant polarization and mistrust among the conservationists, private developers, and public agencies with plans connected to the canal's future. Moving from confrontation to consensus building was a major defining aspect of the plan.

The planning process made the citizens and the leaders of Augusta aware of the central role that they would have to play in the implementation of the plan. Using the city's heritage to create a strong vision for the future, the plan became the vehicle for demonstrating that today's Augusta residents could create a third life for their city through the canal, just as their forefathers did in the 1840s, when the canal was conceived as a transportation corridor, and again in the 1870s, when the canal was enlarged to accommodate post-Civil War industrialization.

Through cooperative effort and shared vision, residents now gain new amenities and revitalization of their neighborhoods; preservationists see historic structures and settings saved through reuse; conservationists secure critical natural settings; educators get new teaching environments; a wide range of recreation opportunities is opened up; and property owners realize increased value.

Credits:

Department of the Interior, National Park Service/SERO

CityDesign Collaborative, Inc.

The Augusta Canal Authority

The Office of Thomas J. Martin

Peter H. Hand Associates, Inc.

W. R. Toole Engineers, Inc.

Bi-State Development Agency/Arts in Transit
St. Louis, MO

Arts in Transit was established to create the design for St. Louis's new 18-mile light rail system. In the process, they created opportunities for neighborhood involvement and economic development, while reducing traffic congestion.

A team of six visual artists were brought in to work with Metro Link's architects and engineers to design the infrastructure of the system. What results is an innovative public works project as well as a collaborative work of public art.

The teams' objective was not simply to decorate spaces but to develop a comprehensive and coherent system that would be visually appealing within the existing construction budget. Design criteria included: development from what is native and characteristic of St. Louis; composition of a set of related components; and a sense of dynamism characterized by changeable elements. Solutions include unique bridge piers, unconventional passenger shelters for outdoor stations, underground tunnel stations that maintain the character of the historic space, and preservation of original architectural remnants. Stations share design qualities such as the curve inspired by the river and arch forms.

Built along a railroad right-of-way, MetroLink is the first light rail system to extensively reuse existing infrastructure as an integral part of its design. It travels through historic, industrial, residential and commercial neighborhoods, and even runs across the Mississippi using the historic Ads Bridge. The LaClede's Landing Station incorporates old brick walls whose arched windows were opened to allow views of the Gateway Arch and the Mississippi River.

Credits:

Department of Tranportation, Federal Transit Administration, Region VII

National Endowment for the Arts, Visual Arts Program

Bi-State Development Agency

Arts in Transit

Sverdrup Corporation

Kennedy/Associates/Architects, Inc.

Booker Associates, Inc.

Kuhlmann Design Group

Booz, Allen & Hamilton, Inc.

LS Transit Systems, Inc.

Todd Williams and Billie Tsien

Austin Tao and Associates

Fort Belvoir Master Plan

Fort Belvoir, VA

Fort Belvoir's mission has changed substantially in recent years. What started as an engineer training center has evolved into a regional, multi-mission center for the U. S. Army The Master Plan was undertaken to assist in adjusting the fort's mission to match its new, broader purpose.

Located on the Potomac River, in a rapidly growing area outside Washington, DC, Fort Belvoir is the largest single tract of land controlled by a single owner in Fairfax County. Careful attention was paid to incorporating the participation of the wide range of entities affected by the plan. These included Fort Belvoir residents, military officials, two county and one city governments, as well as the area's commuter rail personnel. Interviews and charrettes were conducted to address environmental, utility, commercial, transportation, and quality of life issues. The resulting plan identified eight separate missions: military, administration logistics, recreation, education, housing, community, and environmental stewardship.

Among the unique issues addressed by the plan was preservation of the historic view corridor from George Washington's home, Mt. Vernon. The plan also carefully planned for environmental issues related to the Chesapeake Bay. Environmental overlays and other constraint analyses were digitized over up-to-date existing base mapping, providing efficient visualization and handling of large quantities of diverse information.

The plan received unanimous approval to implement its master plan, giving the post clear guidelines for its land use, including traffic and utility programs for the next 20 years. The Fort Belvoir Long Range Plan is a model for military planning. Its exemplary level of participation coupled with its comprehensiveness present a logical course of action to manage the development of land, facilities, resources and infrastructure for this and other complex military bases.

Credits:

Department of Defense, U.S. Army, Corps of Engineers, Baltimore District and the Fort Belvoir Directorate of Public Works

Woolpert Consultants, Alexandria

Woolpert Consultants, Charlotte

Woolpert Consultants, Dayton

Historic Family Quarters Preservation Program

U.S. Army Military District of Washington, DC

Since a large number of this nation's military bases were established before World War I, they contain a vast number and type of historic structures. Base historic housing is often seen as a nuisance because of higher upkeep costs, demanding technical problems, and required compliance procedures. It was the high cost of maintaining these structures that led the Department of Defense to develop the Historic Family Quarters Preservation Program. This comprehensive management program for the maintenance and repair of historic military family quarters is recognized for achievement in balancing historic preservation goals with the ongoing functional needs of housing for Army personnel.

As one of the earliest preservation initiatives of the Defense Department, this effort provides a model for guidelines that preserve the historical resources of military installations. Using three locations within the Military District of Washington as a model, a task force developed a set of stewardship standards of exterior and interior treatments that comply with the Secretary of Interior's Standards for Rehabilitation. Further, they produced a set of guidebooks providing direction on the repair or replacement of specific components, from lighting fixtures to roofing. Since most historic Army housing was built from standardized plans, many identical quarters exist in vast quantities nationwide, making the guidebooks applicable to at least 48 installations with the same buildings.

Another critical component of the program was the development of a Maintenance Management Plan for the quarters. It prioritizes maintenance tasks and recommends preventive maintenance, extending the useful life of building materials and reducing the possibility of sudden system failures.

Credits:

Department of Defense, U.S. Army, Military District of Washington

Hanbury Evans Newill Vlattas & Company

National Law Enforcement Officers Memorial

Washington, DC

Graceful and elegant are the words most often used to describe the National Law Enforcement Officers Memorial in Washington, DC. Located in Judiciary Square, the memorial is surrounded by large historic buildings. Rather than competing with the massive Italian Renaissance style National Building Museum or the classical judicial buildings, it creates unity and context where once there was none.

Unlike most memorials, which commemorate specific events or persons, this is an on-going memorial, and was created to honor future, as well as past, fallen officers. Their names are inscribed on gently curving low stone walls that envelop the square. Befitting a living memorial, the site is also a park, complete with pergolas, benches, reflecting pool, and a variety of seasonal and perennial plantings. The memorial is free from heavy architectural structures, which might intrude upon the sight lines and compete with the buildings that so beautifully frame the space.

The site is all the more remarkable when one considers its sorry past. For years the square was synonymous with neglect. Parked cars and Metro escalators and elevators made the location ugly. The location over a Metro station required that the design integrate those existing structures. The elevators were incorporated into the pergola, and the air relief vents were repositioned within the landscaped lawn areas.

Working with six federal and eight local agencies and review bodies, architect Davis Buckley successfully navigated the maze of reviews and approvals required for Washington memorials. The resulting design contains a number of innovative features. For example, the pergola structures were designed with acute angles on the upper bars to deter roosting pigeons. Innovative soil stabilization methods included building a soil cement mat over the existing Metro tunnel.

This is a wonderful example of how neglected urban spaces can and should be used for civic purposes.

Credits:

Department of the Interior, National Park Sevice, National Capital Region

Davis Buckley, Architects and Planners

National Law Enforcement Officers Memorial Fund

Peterson Air Force Base Comprehensive Plan

Peterson Air Force Base, CO

Located in the rapidly growing area outside Colorado Springs, Peterson Air Force base occupies 1,278 acres and is home to the U.S. Space Command and Air Force Space Command. The comprehensive plan was undertaken to establish a baseline planning document that would guide the facility as it coped with its on-going growth and prepared for the future.

Faced with a tight deadline since earlier work on a plan had been stopped, the developers of the new plan established an in-house management team that provided a flexible process for managing the base's growth and development, and integrated planning efforts with surrounding communities. This team-work process was highly successful, providing easier access to military and civilian leaders and establishing a broader base of experience and contacts.

The plan's environmental design guidelines were a pioneering effort for the Air Force. Since there were no existing models, Peterson Air Force Base created one. The base was in urgent need of this design control tool to bring visual and functional order to its environment, including landscape treatment, signage, lighting, street furnishings and waste management features.

The use of computer mapping throughout the project was also an unprecedented and innovative outcome of the planning process, providing a powerful interactive medium on which to maintain an up-to-date, living planning document/database. This has been integrated with other data sources, leading to safer and more cost effective facility sitings and allowing faster identification of natural and man-made constraints.

Credits:

Department of Defense, U.S. Air Force, Peterson Air Foce Base, 21st Space Wing, 21st Support Group and 21st Civil Engineer Squadron

Higginbotham/Briggs & Associates

Leigh, Scott & Cleary, Inc.

PRESIDIO GENERAL MANAGEMENT PLAN
San Francisco, CA

Presiding over one of the most outstanding vistas in this country, the Presidio is at a turning point in its history. The 1995 closure of the military base that has been located on that site for 220 years set into motion a major planning effort by the National Park Service, which will take over its management. In addition to its magnificent view of the Golden Gate and San Francisco Bay, the 1,480 acre area contains an enormous wealth of cultural, natural and recreational resources.

The Presidio planning process has been one of the most open and participatory endeavors ever undertaken by the National Park Service. It has involved individuals throughout the country and enlisted many groups not traditionally involved in park planning. The planning team employed vision workshops, newsletters, concept workbooks and numerous public meetings as part of the public review process. Among the challenges faced by the planners were determining appropriate treatments for the vast number of historic resources contributing to its national historic landmark status, transportation planning in an area where traffic congestion is already a serious concern, and developing a strategy to meet operational and financial challenges of implementation.

The resulting plan breaks away from traditional park planning, calling for innovative approaches to management and prescribing a bold vision for the Presidio. The entire site is to become a model of sustainability and innovative technology. It will be the setting for programs that promote stewardship of global resources, provide youth with skills and commitment to public service, and explore methods to improve the health of people and the planet. In short, it will be a model urban national park for the 21st century.

Credits:

Department of the Interior, National Park Service, Denver Service Center and the Presidio Project Office

Redesign of Diggs Town

Norfolk, VA

Like many of this country's public housing projects, Diggs Town was plagued with the worst of society's problems: unemployment, crime, drugs, and decay. The 1950s-era complex in Norfolk, Virginia, leveraged public housing modernization funds from the U.S. Department of Housing and Urban Development to transform a "project" into a neighborhood.

HUD and city government officials worked with the design team and Diggs Town residents to create cohesion, bolster safety, and foster a sense of community pride. Principles of traditional American urbanism were applied to this distressed complex. Limited funds supported minimal structural changes, but they had enormous physical and psychological effects on the complex and its residents. Front porches were added to the low-rise, multi-family units, encouraging residents to communicate and get to know each other. Fences secured private space, giving residents control over the outdoor areas that had previously been claimed by gangs. And new, small-scale streets provide parking, public security and the pride of having a "street address."

Residents also worked with city and federal officials to establish a drug elimination program, create over 20 jobs with the project contractor, as well as plan early childhood education and recreation programs. In fact, the residents were key to defining the problems and establishing the process that led to the redesign of Diggs Town. "Village meetings" with the designers and government managers were conducted regularly in resident back yards over six months to create the plan.

The process at Diggs Town demonstrates how the involvement of residents and the application of creative design solutions brought together with social programs can make "neighborhoods" out of "projects."

Credits:

Department of Housing and Urban Development, Virginia State Office

Norfolk Redevelopment and Housing Authority

Diggs Town Tenant Management Corporation

UDA Architects

CMSS Architects

River Relocation Project

Providence, RI

Moving rivers might appear to be a Herculean task to some, but in Providence, Rhode Island, city planners have done just that, and, in the process, have knit together the urban fabric of their city. Not far from the spot where Roger Williams first stepped ashore in 1636, the Woonasquatucket, Moshassuck and Providence Rivers have been reconfigured, creating a "Y"-shaped landscaped river corridor at the center of the city, connecting existing parks, accommodating both boat traffic and a pedestrian walkway.

The river-moving is just part of a major urban revitalization plan that includes removing acres of roadway decking and interstate access ramps that obscured the rivers, providing navigational lanes for small craft, improving pedestrian access; clarifying traffic patterns, and beautifying what had previously been an eye-sore. Seven distinct new bridges have been designed to accommodate vehicles, and five other new bridges are dedicated for pedestrian use. They collect and distribute traffic from the core of the city and tie into the interstate system. A four-acre park, called Waterplace, at the western terminus of the new walkway system contains a visitor center, an amphitheater, fountain and several small plazas.

The project's ability to bring aesthetic beauty to a great variety of large and small elements is remarkable. The new bridges have been designed with gentle arches that reflect in the water and allow small boats to pass through. Pedestrian walkways along the riverbanks have been paved with old cobblestones dug up from when an old city street was resurfaced. And large granite blocks, salvaged from a demolished railroad viaduct, line the river walls. Even the smallest details have been carefully considered for their beauty as well as functionality. In addition to the previously mentioned recycled materials, cast iron railing bollards and bronze hand rails promise long-term service and low maintenance.

Public participation has been the hallmark of the design process dating from the initial 1983 waterfront study that launched the effort. A design advisory committee composed of citizens and public agencies participated in the design process on a regular basis. In addition, several public workshops and hearings were conducted.

The River Relocation Project is an ambitious and graceful effort that succeeds in improving the city's infrastructure and traffic problems and turning around the image of the waterfront, drawing business and pedestrians to its amenities and beauty.

Credits:

Department of Transportation, Federal Highway Administration, Region 1

Rhode Island Department of Transportation

William D. Warner, Architects & Planners

Maguire Group, Inc.

Staples Street Station
Corpus Christi, TX

Staples Street Station is in downtown Corpus Christi, Texas, amid the city's municipal complex. It is also the city's most heavily used bus transfer point. Before the station was built, transit passengers were required to rush across busy traffic intersections to make their connections at five separate locations and to wait for their buses on congested sidewalks. The new station consolidates the stops, allowing passengers to alight from one bus and immediately board the next.

The structure's design is in the Spanish Colonial style, with golden-tan stucco and arches, complementing the city hall building across the street. The station has a friendly, welcoming feel that is enhanced by the cheerful decor. Following a number of citizen and business-leader meetings to discuss the development of the station held by the Regional Transit Authority, it became clear that residents wanted the station to reflect the community. The local arts center created a means for residents to literally make their mark on the new station. The 1,500 ceramic tiles that grace the station were all designed and painted by residents.

Since personal safety was a high priority, station designers ensured increased lighting and clear line of sight vistas by minimizing obstructions. Customer comfort was accommodated with many seating areas, maximum shade, water fountains, and concise information displays. The design even includes spaces for street vendors who sell refreshments to transit riders. This unique bus station demonstrates the impact of a well-planned outreach effort, enabling the design of a friendly, functional, attractive and cost-effective public space that benefits the entire city.

Credits:

Department of Tranportation, Federal Transit Administration, Region VI

Corpus Christi Regional Transportation Authority

Creative Arts Center

Projects for Public Space

Teaching with Historic Places, National Park Service

Our nation's historic places are invaluable teaching tools, but until recently there was not a systematic way for teachers across the country to use them in conjunction with their existing lesson plans. Recognizing the potential to provide students with an understanding of the nation's cultural diversity and historic traditions, help communities appreciate and protect their unique character, and foster stewardship among young people and citizen groups to assist in protecting historic resources, Teaching with Historic Places was created jointly by the National Park Service's National Register of Historic Places and the National Trust for Historic Preservation.

It was clear that lesson plans for teaching with historic places had to be integrated into existing course structures, so extensive research was conducted on the various opportunities to add a preservation component to existing curricula in subjects such as history, social studies, and geography.

A team of nationally recognized preservationists and educators recommended development of an on-going series of classroom-ready lesson plans; educational kits consisting of several thematically-linked lesson plans, audio-visual materials, and a teacher guide; and a technical assistance kit on how to teach with historic places. Teacher training opportunities are offered several times a year to disseminate the program's methodology.

The lesson plans are based on properties listed on the National Register, using an array of maps, readings, visual documents, and activities to develop and strengthen critical and analytical thinking skills. At least one activity in every lesson plan leads the students into their own community to find and research similar themes and historic places. Teaching with Historic Places provides a national model that establishes a mutually beneficial partnership between educators and preservationists, making students more aware of their cultural heritage.

Credits:

Department of the Interior, National Park Service, National Register of Historic Places/Interagency Resources Division

National Trust for Historic Preservation

Daydream Design

TRADOC Communities of Excellence Program, The U.S. Army Training and Doctrine Command

Fort Monroe, VA

The United States Army Training and Doctrine Command (TRADOC) is made up of 18 installations and several Army Service Schools whose mission is to provide basic and advanced training to officers and enlisted personnel. These installations provide more than just training. They are communities, not unlike cities and towns, and have a direct link to the morale, welfare and sense of well-being of its residents. Recognizing growing disrepair on the bases and lack of investment in their surroundings by residents, TRADOC established its Communities of Excellence Program to improve the quality of life and urban environments of TRADOC installations.

The program faced the challenge of integrating community involvement and stewardship practices where they were not normally recognized or promoted. The implementation approach was designed to reach a broad audience of military personnel and "non-designers." An annual training program outlined guidance by which installations prepared for annual evaluations. Manuals that graphically depict design standards and illustrate various levels of design quality were produced for a wide variety of facilities, including transient quarters, commissaries, and outdoor training areas.

This program has facilitated an awareness of urban planning and identified continuous community and quality improvements as an integral aspect of planning on all TRADOC installations. The program has raised expectations command-wide and created informed, demanding and involved citizenry who have become part of a TRADOC community's planning process.

Credits:

Department of Defense, U.S. Army, Training and Doctrine Command

E.L. Hamm and Associates, Inc.

Williams, Tazewell and Associates, Inc.

Walnut Street Bridge

Chattanooga, TN

Built in 1891, when it was heralded as an engineering marvel, today the Walnut Street Bridge is a testament to the citizens of Chattanooga and their commitment to preserving their past while creating a vibrant new public space. Deemed unsafe when closed in 1978, the bridge faced demolition before concerned city residents stepped in and had it placed on the National Register of Historic Places. Popular support grew as plans unfolded to transform the bridge into a rather unusual park.

Today's traffic on the bridge is not motorized. Rather one finds pedestrians, cyclists, readers, kite-flyers and roller-skaters, to name a few. The bridge is also fully accessible to the handicapped, with careful attention given to connecting the roadbed and the cantilevered sidewalks with transitional ramps. Benches and planters, as well as new lighting, now encourage recreation and leisure activities.

With funds from the Federal Highway Administration, the engineering firm developed a post-tensioned cable system for the project that has become a model for the restoration of historic bridges. Its virtual invisibility has minimal impact on the span's historic character, yet makes it stronger than when originally built. In homage to the original bridge, a wooden deck was created, and all existing ornamental railings were restored. The firm also used an innovative steel grit blasting technique that recycled the grit after separating the toxic lead, saving hundreds of thousands of dollars in landfill costs for contaminated sand blast material.

Walnut Street Bridge is now a key element in the city's river front revitalization. This project not only developed a cost-effective way to give old bridges new life but also physically and psychologically connect the city with a resurgent aspect of its culture.

Credits:

Department of Transportation, Federal Highway Administration, Tennessee Division

Garnet Chapin Architects

A. G. Lichtenstein & Associates, Inc.

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